Access DB# 119033

SEARCH REQUEST FORM

RECEIVED

Scientific and Technical Information Center APR -8 2004

Requester's Full Name: Molly Ceperley Examiner #: 59751 Date: 04/08/04
Art Unit: 1641 Phone Number 30-2-0813 Serial Number: 10/025,196
Mail Box and Bldg/Room Location: Rem 3A51 Results Format Preferred (circle): (PAPER) DISK E-MAIL
↳ Rem 3C70

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____ Bibliographic data sheet attached

Earliest Priority Filing Date: 11/02/01

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for the combination of each of terms (A) + (B) + (C). See claims attached.

(A)

→ formula (1) of claim 1 [broden R to 1-20 carbon atoms]
→ see compounds of claim 3 (structures page 8)

(B)

→ agglutination
- latex agglutination
- particle agglutination

→ see particles page 8
→ turbidimetric
→ aggregat?

(C)

succinimide ester
N-hydroxysuccinimide (NHS
N-hydroxysulfosuccinimide

****

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher:	NA Sequence (#)	STN 973,01
Searcher Phone #:	AA Sequence (#)	Dialog
Searcher Location:	Structure (#)	Questel/Orbit
Date Searcher Picked Up: 4/12	Bibliographic	Dr.Link
Date Completed: 4/13	Litigation	Lexis/Nexis
Searcher Prep & Review Time: 20	Fulltext	Sequence Systems
Clerical Prep Time:	Patent Family	WWW/Internet
Online Time: 36	Other	Other (specify)

PTO-1590 (8-01)

```
=> d que
L7                  STR

H2N~Ak~G1~G2          O=C~O~Et        O~Ak
  8   1  2  3         4  @5  6  7      @9 @10
```

3 R = Alkyl Ester

Considered 04/15/04 MEC

```
REP G1=(1-10) 9-1 10-3
VAR G2=NH2/OH/5
NODE ATTRIBUTES:
CONNECT IS E2  RC AT   1
CONNECT IS E2  RC AT  10
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  10

STEREO ATTRIBUTES: NONE
L9        537472 SEA FILE=REGISTRY ABB=ON  PLU=ON  ((N>1 AND O/ELS) OR (O>1 AND
                 N/ELS)) AND NC=1 NOT (PMS/CI OR IDS/CI OR RSD/FA)
L13       236335 SEA FILE=REGISTRY ABB=ON  PLU=ON  L9 AND (N/ELS AND C/ELS AND
                 O/ELS AND H/ELS) AND 4/ELC.SUB
L15          174 SEA FILE=REGISTRY SUB=L13 SSS FUL L7
L17              STR

H2N~Ak~G2          O=C~O~Et
  1  2  3          4  @5  6  7
```

∈ R = Alkyl

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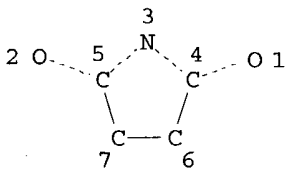
VAR G2=NH2/OH/5
NODE ATTRIBUTES:
CONNECT IS E2  RC AT   2
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   7

STEREO ATTRIBUTES: NONE
L19       279433 SEA FILE=REGISTRY ABB=ON  PLU=ON  ((N/ELS AND C/ELS AND H/ELS
                 AND 3/ELC.SUB) OR (N/ELS AND C/ELS AND H/ELS AND O/ELS AND
                 4/ELC.SUB)) AND NC=1 NOT (PMS/CI OR IDS/CI OR RSD/FA)
L21         2985 SEA FILE=REGISTRY SUB=L19 SSS FUL L17
L22       108246 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L15 OR L21
L23        19571 SEA FILE=HCAPLUS ABB=ON  PLU=ON  AGGLUTINATION+NT/CT OR
                 AGGLUTINAT?
L24           62 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22 AND L23
L26              STR
```

3 agglutinat.on



Saccin... gp.

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NODE ATTRIBUTES:
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS   7

STEREO ATTRIBUTES: NONE
L28         4595 SEA FILE=REGISTRY SSS FUL L26
L29       121510 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L28 OR SUCCIN?
L30            8 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L24 AND L29
L31        49057 SEA FILE=HCAPLUS ABB=ON  PLU=ON  IMMUNOASSAY+OLD,NT/CT
L32          314 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L22 AND L31
L33           51 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L32 AND L29
L34            6 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 AND L23
L35            8 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30 OR L34
L36           43 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L33 AND ANTIBOD?
L37           20 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36 AND (PARTICL? OR ?STYREN?
                 OR ?METHYLMETHACRYL? OR GOLD OR SILICA OR GLASS OR OXIDE)
L39           23 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L35 OR L37
```

Immunoassay

Particles

```
=> d 139 ibib ab hitind hitstr 1-23

L39  ANSWER 1 OF 23  HCAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2004:252116  HCAPLUS
DOCUMENT NUMBER:          140:249788
TITLE:                    Method of coupling binding agents to a substrate
                          surface
INVENTOR(S):              Safsten, Par; Tidare, Mattias
PATENT ASSIGNEE(S):       Biacore Ab, Swed.
SOURCE:                   U.S. Pat. Appl. Publ., 14 pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     US 2004058456      A1   20040325       US 2003-449823   20030530
PRIORITY APPLN. INFO.:                     SE 2002-1637     A  20020531
                                           US 2002-384626P  P  20020531
```

AB The present invention relates to a method of coupling multiple binding agents to resp. areas of a substrate surface by hydrodynamic addressing, using two laminar fluid flows that flow together in the same direction over the substrate surface with an interface to each other to successively couple the binding agents to the substrate areas, wherein each successive coupling of a binding agent to a surface area is followed or preceded by selective deactivation or activation of a selected surface area according to a defined protocol. The invention also relates to the use of such a binding agent-coupled substrate surface for anal. purposes. The present invention relates to a method of coupling multiple binding agents to resp. areas of a substrate by hydrodynamic addressing, using two laminar fluid flows that flow together in the same direction over the substrate surface with an interface to each other to successively couple the binding agents to the substrate areas, wherein each successive coupling of a binding agent to a surface area is followed or preceded by selective deactivation or activation of a selected surface area according to a defined protocol.

The invention also relates to the use of such binding agent-coupled substrate surface for anal. purposes. In example, the method of the invention was used to couple anti-IL-8, anti-IL-10 and anti-IL12 **antibodies** onto the sensor chip surface of a BIACORE S51 instrument comprising two Y-type flow cells. The biosensor is useful for detn. of interleukins 8, 10 and 12.

IC ICM G01N033-543
ICS B05D003-00

NCL 436518000; 427002110

CC 9-16 (Biochemical Methods)
Section cross-reference(s): 15

ST **antibody** ligand sensor chip hydrodynamic addressing laminar fluid flow

IT Fluids
(activation, deactivation and blocking; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT **Immunoassay**
(app.; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT Biosensors
Computer program
Hydrogels
(coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT Interleukin 10
Interleukin 12
Interleukin 8
Myoglobins
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT **Antibodies**
Ligands
Polymers, analysis
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT Cytometry
(flow, Y-type; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT Flow
(laminar; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT 6066-82-6, N-Hydroxy-**succinimide** 25952-53-8, EDC (coupling agent)
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(activation; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT 7440-57-5, **Gold**, analysis 9044-05-7, Carboxymethyl dextran
RL: ARU (Analytical role, unclassified); BUU (Biological use,

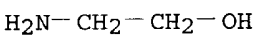
unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT **141-43-5**, Ethanolamine, analysis
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(deactivation; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT 9001-15-4, Creatine kinase
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(isoenzyme MB; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT **141-43-5**, Ethanolamine, analysis
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(deactivation; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

RN 141-43-5 HCAPLUS
CN Ethanol, 2-amino- (8CI, 9CI) (CA INDEX NAME)



L39 ANSWER 2 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:972335 HCAPLUS
DOCUMENT NUMBER: 140:15865
TITLE: Coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows
INVENTOR(S): Saeften, Paer; Tidare, Mattias
PATENT ASSIGNEE(S): Biacore Ab, Swed.
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003102580	A1	20031211	WO 2003-SE879	20030528

W: AU, JP, US
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR

PRIORITY APPLN. INFO.: US 2002-384626P P 20020531

AB The present invention relates to a method of coupling multiple binding agents to resp. areas of a substrate by hydrodynamic addressing, using two laminar fluid flows that flow together in the same direction over the substrate surface with an interface to each other to successively couple the binding agents to the substrate areas, wherein each successive

coupling of a binding agent to a surface area is followed or preceded by selective deactivation or activation of a selected surface area according to a defined protocol. The invention also relates to the use of such binding agent-coupled substrate surface for anal. purposes. In example, the method of the invention was used to couple anti-IL-8, anti-IL-10 and anti-IL12 **antibodies** onto the sensor chip surface of a BIACORE S51 instrument comprising two Y-type flow cells. The biosensor is useful for detn. of interleukins 8, 10 and 12.

IC G01N033-52; G01N001-00

CC 15-3 (Immunochemistry)
Section cross-reference(s): 9

ST **antibody** ligand sensor chip hydrodynamic addressing laminar fluid flow

IT Fluids
(activation, deactivation and blocking; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT **Immunoassay**
(app.; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT Reagents
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(binding; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT Biosensors
Computer program
Functional groups
Hydrogels
Immunoassay
(coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT Interleukin 10
Interleukin 12
Interleukin 8
Myoglobins
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT **Antibodies**
Ligands
Polymers, biological studies
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT Cytometry
(flow, Y-type; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT Samples
(fluid; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT Flow

(laminar; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT 6066-82-6, N-Hydroxy-**succinimide** 25952-53-8, EDC (coupling agent)
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(activation; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

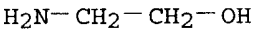
IT 7440-57-5, **Gold**, biological studies 9044-05-7, Carboxymethyl dextran
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT **141-43-5**, Ethanolamine, biological studies
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(deactivation; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT 9001-15-4, Creatine kinase
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
(isoenzyme MB; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

IT **141-43-5**, Ethanolamine, biological studies
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DEV (Device component use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(deactivation; coupling **antibodies** or ligands to substrate surface of sensor chip by hydrodynamic addressing using two laminar fluid flows)

RN 141-43-5 HCAPLUS
CN Ethanol, 2-amino- (8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 3 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:633158 HCAPLUS
DOCUMENT NUMBER: 139:161812
TITLE: Detection method using dissociated rolling circle amplification
INVENTOR(S): Kumar, Gyanendra; Abarzua, Patricio; Egholm, Michael
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 44 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003152932	A1	20030814	US 2002-72666	20020208
WO 2003066908	A1	20030814	WO 2003-US678	20030109

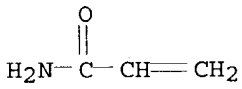
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-72666 A 20020208

AB Disclosed are compns. and methods for detecting small quantities of analytes such as proteins and peptides. The method involves assocg. a DNA circle with the analyte and subsequent release and rolling circle replication of the circular DNA mol. In the method, an amplification target circle is assocd. with analytes using a conjugate of the circle and a specific binding mol. that is specific for the analyte to be detected. Amplification target circles not assocd. with the proteins are removed, the amplification target circles that are assocd. with the proteins are decoupled from the specific binding mol. and amplified by rolling circle amplification. The amplification is isothermic and can result in the prodn. of a large amt. of nucleic acid from each primer. The amplified DNA serves as a readily detectable signal for the analytes.

IC ICM C12Q001-68
ICS C12P019-34
NCL 435006000; 435091200
CC 9-15 (Biochemical Methods)
IT **Antibodies**
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(detection method using dissocd. rolling circle amplification)
IT **Glass**, uses
RL: DEV (Device component use); USES (Uses)
(detection method using dissocd. rolling circle amplification)
IT **Immunoassay**
(enzyme-linked immunosorbent assay; detection method using dissocd. rolling circle amplification)
IT **79-06-1**, Acrylamide, analysis 9004-34-6, Cellulose, analysis 9004-70-0, Nitrocellulose 9012-36-6, Agarose 57757-57-0 59012-54-3, Dimethyl 3,3'-dithiobispropionimidate 68181-17-9, N-**Succinimidyl** 3-(2-pyridyldithio)propionate 77658-91-4 81069-02-5, 3,3'-Dithiobis sulfosuccinimidyl propionate 118674-04-7 158913-22-5 189013-00-1
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(detection method using dissocd. rolling circle amplification)
IT 7440-57-5, **Gold**, uses 7803-62-5, Silane, uses 9002-84-0, Teflon 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9003-53-6, **Polystyrene** 24937-78-8, Polyethylenevinyl acetate 25087-26-7, Polymethacrylic acid 25322-68-3, Polyethylene **oxide**
RL: DEV (Device component use); USES (Uses)
(detection method using dissocd. rolling circle amplification)
IT **79-06-1**, Acrylamide, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(detection method using dissocd. rolling circle amplification)

RN 79-06-1 HCAPLUS
CN 2-Propenamide (9CI) (CA INDEX NAME)



L39 ANSWER 4 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:488678 HCAPLUS
DOCUMENT NUMBER: 139:49497
TITLE: Tertiary amine compounds for use in immunoassays
INVENTOR(S): Lawrence, Christopher C.; Shanafelt, Armen B.
PATENT ASSIGNEE(S): Roche Diagnostics GmbH, Germany; F. Hoffmann-La Roche AG
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1321770	A2	20030625	EP 2002-27992	20021214
EP 1321770	A3	20031217		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2003138974	A1	20030724	US 2001-25378	20011218
JP 2003207512	A2	20030725	JP 2002-363686	20021216

PRIORITY APPLN. INFO.: US 2001-25378 A 20011218
OTHER SOURCE(S): MARPAT 139:49497

related

AB A reagent for use in immunoassays reduces interference in **particle agglutination** assays. The reagent contains **particles** having covalently bound **antibodies** and a tertiary amine compd. of formula (I): N(R1-X)(R2-Y)(R3-Z). The moieties R1, R2, and R3 are independently alkyl or alkyl ether. The moieties X, Y, and Z are independently -OH, -O-R4, -S-R4, -C(=O)-OH, -C(=O)-OR4, or -C(=O)-NHR4 and R4 is alkyl. Triethanolamine gave improved performance in latex **agglutination** immunoassays.

IC ICM G01N033-53
ICS G01N033-543
CC 9-10 (Biochemical Methods)
ST tertiary amine reducing interference **particle agglutination** immunoassay; latex **agglutination** immunoassay triethanolamine reducing nonspecific binding
IT **Immunoassay**
(**agglutination** test; tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT **Antibodies**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(immobilized; tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT **Immunoassay**
(latex **agglutination** test; tertiary amine compds. for reducing interference in **particle agglutination**

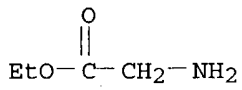
immunoassays)
IT **Antibodies**
RL: ARG (Analytical reagent use); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)
(monoclonal, latex **particles** sensitized with; tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT Carbodiimides
RL: RCT (Reactant); RACT (Reactant or reagent)
(**particle** surface activation with; tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT Latex
(**particles**; tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT Amines, preparation
RL: SPN (Synthetic preparation); PREP (Preparation)
(reaction products, with **succinimide** esters, on **particle** surface; tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT Blood analysis
Immobilization, molecular or cellular
Immunoassay
Microparticles
Test kits
(tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT Amines, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(tertiary; tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT **Particles**
(with immobilized **antibodies**; tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT **459-73-4DP**, Glycine ethyl ester, reaction products with **succinimide** ester **929-06-6DP**, reaction products with **succinimide** ester **929-59-9DP**, 2,2'-(Ethylenedioxy)bisethylamine, reaction products with **succinimide** ester **4246-51-9DP**, 4,7,10-Trioxa-1,13-tridecanediamine, reaction products with **succinimide** ester
RL: SPN (Synthetic preparation); PREP (Preparation)
(on **particle** surface; tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT 1403-66-3, Gentamicin
RL: ANT (Analyte); ANST (Analytical study)
(tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT 102-71-6, Triethanolamine, analysis 104-78-9, 3-Diethylaminopropylamine 109-54-6, Dimethylaminopropylchloride 109-55-7, 3-Dimethylaminopropylamine 121-44-8, Triethylamine, analysis 32897-26-0, 1-Ethyl-3-(3-dimethylaminopropyl)urea
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
IT 633-96-5 **929-06-6** 1892-57-5, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide 6066-82-6, N-Hydroxysuccinimide

RL: RCT (Reactant); RACT (Reactant or reagent)
(tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)

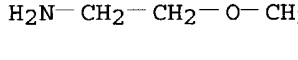
IT **123-56-8DP**, **Succinimide**, esters, reaction products with primary amine on **particle** surface
RL: SPN (Synthetic preparation); PREP (Preparation)
(tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)

IT **459-73-4DP**, Glycine ethyl ester, reaction products with **succinimide** ester **929-06-6DP**, reaction products with **succinimide** ester **929-59-9DP**, 2,2'-(Ethylenedioxy)bisethylamine, reaction products with **succinimide** ester **4246-51-9DP**, 4,7,10-Trioxa-1,13-tridecanediamine, reaction products with **succinimide** ester
RL: SPN (Synthetic preparation); PREP (Preparation)
(on **particle** surface; tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)

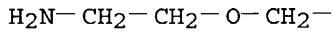
RN 459-73-4 HCAPLUS
CN Glycine, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



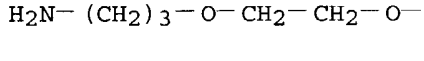
RN 929-06-6 HCAPLUS
CN Ethanol, 2-(2-aminoethoxy)- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 929-59-9 HCAPLUS
CN Ethanamine, 2,2'-[1,2-ethanediylbis(oxy)]bis- (9CI) (CA INDEX NAME)

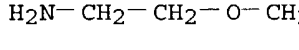


RN 4246-51-9 HCAPLUS
CN 1-Propanamine, 3,3'-[oxybis(2,1-ethanediyloxy)]bis- (9CI) (CA INDEX NAME)

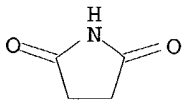


IT **929-06-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)

RN 929-06-6 HCAPLUS
CN Ethanol, 2-(2-aminoethoxy)- (7CI, 8CI, 9CI) (CA INDEX NAME)



IT **123-56-8DP**, **Succinimide**, esters, reaction products with primary amine on **particle** surface
RL: SPN (Synthetic preparation); PREP (Preparation)
(tertiary amine compds. for reducing interference in **particle agglutination** immunoassays)
RN 123-56-8 HCAPLUS
CN 2,5-Pyrrolidinedione (9CI) (CA INDEX NAME)



L39 ANSWER 5 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:376312 HCAPLUS
DOCUMENT NUMBER: 138:365138
TITLE: **Particles** for immunoassays and methods for treating the same
INVENTOR(S): Lawrence, Christopher C.; Yuan, Wei; Shanafelt, Armen B.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003092201	A1	20030515	US 2001-53058	20011102
US 2003087458	A1	20030508	US 2001-25196	20011218
EP 1319953	A1	20030618	EP 2002-24080	20021029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2003185667	A2	20030703	JP 2002-318893	20021031

PRIORITY APPLN. INFO.: US 2001-53058 A2 20011102
US 2001-25196 A 20011218

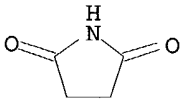
OTHER SOURCE(S): MARPAT 138:365138
AB A method of treating **particles** to be used in immunoassays reduces interference in **particle agglutination** assays. For **particles** having covalently bound **antibodies** and residual NHS-ester or sNHS-ester groups on the surface, the reactive esters are treated with an aq. mixt. contg. an amine compd. of formula (I): H2N-R-X. The moiety -X is -NH2, -OH, or -CO2CH2CH3; and R is an alkyl group or an alkyl ether group. When -X is -NH2 or -CO2CH2CH3, R contains from 1 to 20 carbon atoms; and when -X is -OH, R contains from 4 to 20 carbon atoms.
IC ICM G01N033-544
ICS B05D003-00
NCL 436528000; 427002110
CC 9-10 (Biochemical Methods)
ST **particle** immunoassay treating
IT Latex
(Activated; **particles** for immunoassays and methods for treating the same)

IT Functional groups
(Alkyl ether; **particles** for immunoassays and methods for treating the same)
IT Functional groups
(Propionyl; **particles** for immunoassays and methods for treating the same)
IT Esters, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Reactive; **particles** for immunoassays and methods for treating the same)
IT **Immunoassay**
(**agglutination** test; **particles** for immunoassays and methods for treating the same)
IT Bond
(covalent; **particles** for immunoassays and methods for treating the same)
IT Carboxyl group
(ionized; **particles** for immunoassays and methods for treating the same)
IT Adsorption
Alkyl groups
Amino group
Blood serum
Ceramics
Chemical formula
Coupling agents
Hydroxyl group
Immunoassay
Interference
Mixtures
Particles
Surface
Test kits
pH
(**particles** for immunoassays and methods for treating the same)
IT Proteins
RL: ANT (Analyte); ANST (Analytical study)
(**particles** for immunoassays and methods for treating the same)
IT Amines, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**particles** for immunoassays and methods for treating the same)
IT **Antibodies**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**particles** for immunoassays and methods for treating the same)
IT Polymers, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**particles** for immunoassays and methods for treating the same)
IT Reagents
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**particles** for immunoassays and methods for treating the same)
IT **123-56-8D**, **Succinimide**, esters 151-51-9, Carbodiimide
459-73-4, Glycine ethyl ester **929-06-6 929-59-9*****,
2,2'-(Ethylenedioxy)bisethylamine ***4246-51-9,

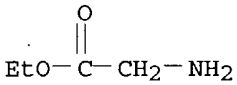
4,7,10-Trioxa-1,13-tridecanediamine 7440-44-0D, Carbon, compds. contg. 7440-57-5, **Gold**, uses 7782-44-7D, Oxygen, esters 82436-78-0, N-Hydroxysulfosuccinimide
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**particles** for immunoassays and methods for treating the same)

IT **123-56-8D**, **Succinimide**, esters **459-73-4**, Glycine ethyl ester **929-06-6 929-59-9**, 2,2'-(Ethylenedioxy)bisethylamine **4246-51-9**, 4,7,10-Trioxa-1,13-tridecanediamine
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**particles** for immunoassays and methods for treating the same)

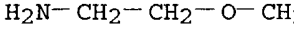
RN 123-56-8 HCAPLUS
CN 2,5-Pyrrolidinedione (9CI) (CA INDEX NAME)



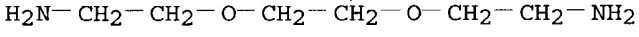
RN 459-73-4 HCAPLUS
CN Glycine, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



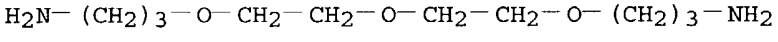
RN 929-06-6 HCAPLUS
CN Ethanol, 2-(2-aminoethoxy)- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 929-59-9 HCAPLUS
CN Ethanamine, 2,2'-[1,2-ethanediylbis(oxy)]bis- (9CI) (CA INDEX NAME)



RN 4246-51-9 HCAPLUS
CN 1-Propanamine, 3,3'-[oxybis(2,1-ethanediyloxy)]bis- (9CI) (CA INDEX NAME)



L39 ANSWER 16 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:355758 HCAPLUS
DOCUMENT NUMBER: 138:350816
TITLE: **Particles** for immunoassays and methods for treating the same

INVENTOR(S): Lawrence, Christopher C.; Yuan, Wei; Shanafelt, Armen B.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S. Ser. No. 53,058.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003087458	A1	20030508	US 2001-25196	20011218
US 2003092201	A1	20030515	US 2001-53058	20011102
EP 1319953	A1	20030618	EP 2002-24080	20021029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2003185667	A2	20030703	JP 2002-318893	20021031

PRIORITY APPLN. INFO.: US 2001-53058 A2 20011102
US 2001-25196 A 20011218

OTHER SOURCE(S): MARPAT 138:350816

AB A method of treating **particles** to be used in immunoassays reduces interference in **particle agglutination** assays. For **particles** having covalently bound **antibodies** and residual NHS-ester or sNHS-ester groups on the surface, the reactive esters are treated with an aq. mixt. contg. an amine compd. of formula (I): 2 The moiety -X is -NH2, -OH, or -CO2CH2CH3; and R is an alkyl group or an alkyl ether group. When -X is -NH2 or -CO2CH2CH3, R contains from 1 to 20 carbon atoms; and when -X is -OH, R contains from 4 to 20 carbon atoms.

IC ICM G01N033-543
ICS G01N033-545; B05D003-00
NCL 436523000; 427002110
CC 9-10 (Biochemical Methods)
ST **particle** immunoassay treating
IT Functional groups
(Alkyl ether; **particles** for immunoassays and methods for treating the same)
IT Esters, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(NHS-; **particles** for immunoassays and methods for treating the same)
IT **Immunoassay**
(**agglutination** test, **Particle**; **particles** for immunoassays and methods for treating the same)
IT Bond
(covalent; **particles** for immunoassays and methods for treating the same)
IT Carboxyl group
(ionized; **particles** for immunoassays and methods for treating the same)
IT Adsorption
Alkyl groups
Amino group
Blood serum
Ceramics
Chemical formula
Coupling agents

Hydroxyl group
Immunoassay
Interference
Latex
Mixtures
Particles
Surface
Test kits
pH
(**particles** for immunoassays and methods for treating the same)

IT Antigens
RL: ANT (Analyte); ANST (Analytical study)
(**particles** for immunoassays and methods for treating the same)

IT **Antibodies**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**particles** for immunoassays and methods for treating the same)

IT Reagents
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**particles** for immunoassays and methods for treating the same)

IT Polymers, uses
RL: DEV (Device component use); USES (Uses)
(**particles** for immunoassays and methods for treating the same)

IT Amines, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(**particles** for immunoassays and methods for treating the same)

IT Carbodiimides
RL: RCT (Reactant); RACT (Reactant or reagent)
(**particles** for immunoassays and methods for treating the same)

IT Proteins
RL: RCT (Reactant); RACT (Reactant or reagent)
(**particles** for immunoassays and methods for treating the same)

IT Albumins, uses
RL: NUU (Other use, unclassified); USES (Uses)
(serum, bovine; **particles** for immunoassays and methods for treating the same)

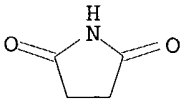
IT 7440-57-5, **Gold**, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**particles** for immunoassays and methods for treating the same)

IT 79-09-4D, Propanoic acid, amines contg. 102-71-6, Triethanolamine, reactions **123-56-8D**, **Succinimide**, esters **459-73-4**, Glycine ethyl ester **929-06-6 929-59-9**, 2,2'-(Ethylenedioxy)bisethylamine **4246-51-9**, 4,7,10-Trioxa-1,13-tridecanediamine 6066-82-6, N-Hydroxysuccinimide 7440-44-0D, Carbon, amines contg. 7782-44-7D, Oxygen, compd. contg. 82436-78-0, N-Hydroxysulfosuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(**particles** for immunoassays and methods for treating the same)

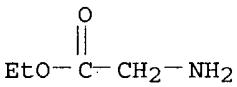
IT **123-56-8D**, **Succinimide**, esters **459-73-4**, Glycine ethyl ester **929-06-6 929-59-9**,

2,2'-(Ethylenedioxy)bisethylamine **4246-51-9**,
4,7,10-Trioxa-1,13-tridecanediamine
RL: RCT (Reactant); RACT (Reactant or reagent)
(**particles** for immunoassays and methods for treating the same)

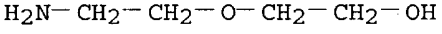
RN 123-56-8 HCAPLUS
CN 2,5-Pyrrolidinedione (9CI) (CA INDEX NAME)



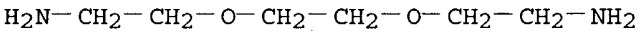
RN 459-73-4 HCAPLUS
CN Glycine, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 929-06-6 HCAPLUS
CN Ethanol, 2-(2-aminoethoxy)- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 929-59-9 HCAPLUS
CN Ethanamine, 2,2'-[1,2-ethanediylbis(oxy)]bis- (9CI) (CA INDEX NAME)



RN 4246-51-9 HCAPLUS
CN 1-Propanamine, 3,3'-[oxybis(2,1-ethanediyloxy)]bis- (9CI) (CA INDEX NAME)

L39 ANSWER 7 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:658054 HCAPLUS
DOCUMENT NUMBER: 135:209885
TITLE: Method for manufacturing and detecting and normalizing HIV for rapid analysis
INVENTOR(S): Smith, Jack V.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 24 pp., Division of U.S. Ser. No. 283318.,
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001019821	A1	20010906	US 2001-843422	20010425

PRIORITY APPLN. INFO.: US 1999-283318 A3 19990331

AB A method for analyzing a sample uses an aq. liq. reagent to det. the concn. of HIV **antibody** in an individual's random urine sample in order to det. the individual's exposure to the HIV virus, and normalizing or correcting this assay value with the sample's creatinine, cystatin C, or sp. gr. concn.

IC ICM C12Q001-70
ICS G01N033-543

NCL 435005000

CC 15-1 (Immunochemistry)

ST HIV **antibody** immunoassay urine analysis; creatinine normalization HIV **antibody** immunoassay urine; cystatin C normalization HIV **antibody** immunoassay urine

IT Immunoglobulins
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(G, **antibodies** to; method for manufg. and detecting and normalizing HIV for rapid anal.)

IT Immunoglobulins
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(M, **antibodies** to; method for manufg. and detecting and normalizing HIV for rapid anal.)

IT **Immunoassay**
(app., lateral flow dipstick; method for manufg. and detecting and normalizing HIV for rapid anal.)

IT **Immunoassay**
(enzyme-linked immunosorbent assay; method for manufg. and detecting and normalizing HIV for rapid anal.)

IT **Immunoassay**
(enzyme; method for manufg. and detecting and normalizing HIV for rapid anal.)

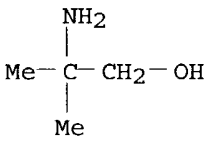
IT **Antibodies**
RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)
(immobilized; method for manufg. and detecting and normalizing HIV for rapid anal.)

IT Buffers
Human immunodeficiency virus
Human immunodeficiency virus 1
Human immunodeficiency virus 2
Immunoassay
Spectrophotometry
Urine analysis
(method for manufg. and detecting and normalizing HIV for rapid anal.)

IT Antigens
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(**particles** coated with, of HIV; method for manufg. and detecting and normalizing HIV for rapid anal.)

IT **Antibodies**
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(to HIV; method for manufg. and detecting and normalizing HIV for rapid

anal.)
IT 56-14-4, **Succinate**, analysis 64-19-7, Acetic acid, analysis 77-86-1, Trizma 103-47-9, Ches 126-44-3, Citrate, analysis 150-25-4, Bicine 1132-61-2, Mops 1310-58-3, Potassium hydroxide, analysis 1310-73-2, Sodium hydroxide, analysis 3198-29-6, analysis 4432-31-9, Mes 5704-04-1, Tricine 7365-44-8, Tes 7365-45-9, Hepes 7365-82-4, Aces 7647-01-0, Hydrochloric acid, analysis 7664-93-9, Sulfuric acid, analysis 7697-37-2, Nitric acid, analysis 10191-18-1, Bes 14265-44-2, Phosphate, analysis 16052-06-5, Epps 26239-55-4, Ada 29915-38-6, Taps 64431-96-5, Bis-tris-propane 68189-43-5, Popso 68399-77-9, Mopso 68399-78-0, Heppso 68399-79-1, Ampso 68399-80-4, Dipso 68399-81-5, Tapso 73463-39-5, Capso
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(buffer; method for manufg. and detecting and normalizing HIV for rapid anal.)
IT 102-71-6, TEA, analysis **124-68-5**, AMP 1135-40-6, CAPS 5625-37-6, PIPES
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(method for manufg. and detecting and normalizing HIV for rapid anal.)
IT 7440-57-5, **Gold**, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(microparticles, conjugates; method for manufg. and detecting and normalizing HIV for rapid anal.)
IT **124-68-5**, AMP
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(method for manufg. and detecting and normalizing HIV for rapid anal.)
RN 124-68-5 HCAPLUS
CN 1-Propanol, 2-amino-2-methyl- (8CI, 9CI) (CA INDEX NAME)



L39 ANSWER 8 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:468181 HCAPLUS
DOCUMENT NUMBER: 135:73673
TITLE: Assay compositions and kits using chemiluminescent compounds and photosensitizers activating oxygen to its singlet state
INVENTOR(S): Ullman, Edwin F.; Kirakossian, Hrair; Pease, John S.; Daniloff, Yuri; Wagner, Daniel B.
PATENT ASSIGNEE(S): Dade Behring Marburg G.m.b.H., Germany
SOURCE: U.S., 38 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6251581	B1	20010626	US 1991-704569	19910522
US 5340716	A	19940823	US 1991-718490	19910620
CA 2069145	AA	19921123	CA 1992-2069145	19920521

NO 9202009	A	19921123	NO 1992-2009	19920521
EP 515194	A2	19921125	EP 1992-304630	19920521
EP 515194	A3	19931020		
EP 515194	B1	20011031		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE				
AU 9217068	A1	19921126	AU 1992-17068	19920521
AU 657134	B2	19950302		
IL 101945	A1	19980208	IL 1992-101945	19920521
IL 116300	A1	19990411	IL 1992-116300	19920521
EP 984281	A2	20000308	EP 1999-121547	19920521
EP 984281	A3	20000607		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT				
EP 984282	A2	20000308	EP 1999-121551	19920521
EP 984282	A3	20000607		
EP 984282	B1	20030730		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT				
AT 208039	E	20011115	AT 1992-304630	19920521
ES 2168092	T3	20020601	ES 1992-304630	19920521
AT 246360	E	20030815	AT 1999-121551	19920521
JP 05180773	A2	19930723	JP 1992-131039	19920522
US 5578498	A	19961126	US 1993-156181	19931122
US 5536834	A	19960716	US 1995-471131	19950606
US 6180354	B1	20010130	US 1995-480430	19950606
US 6406913	B1	20020618	US 1995-471130	19950606
US 5811311	A	19980922	US 1995-488228	19950607
US 5780646	A	19980714	US 1996-660029	19960606
US 6340599	B1	20020122	US 1998-75264	19980511
US 2002058280	A1	20020516	US 2001-985254	20011102
US 6692975	B2	20040217		

PRIORITY APPLN. INFO.:	US 1991-704569	A	19910522
	US 1991-718490	A	19910620
	EP 1992-304630	A3	19920521
	IL 1992-101945	A3	19920521
	US 1993-156181	A3	19931122
	US 1995-471131	A1	19950606
	US 1995-488228	A1	19950607
	US 1998-75264	A3	19980511

AB Compns. and kits are disclosed for detg. an analyte in a medium suspected of contg. the analyte. One method comprises treating a medium suspected of contg. an analyte under conditions such that the analyte, if present, causes a photosensitizer and a chemiluminescent compd. to come into close proximity. The photosensitizer generates singlet oxygen and activates the chemiluminescent compd. when it is in close proximity. The activated chemiluminescent compd. subsequently produces light. The amt. of light produced is related to the amt. of analyte in the medium. Preferably, at least one of the photosensitizer and chemiluminescent compd. is assocd. with a surface which is usually a suspendable **particle**, and a specific binding pair member is bound thereto. Prepn. of assay reagents and assays for vitamin B12, digoxin, human chorionic gonadotropin, TSH, and a target oligonucleotide are described. The digoxin assay used digoxin conjugated with 6-carboxyfluorescein via a linker from bis-(3-aminopropyl)methylamine, biotinylated monoclonal **antibody** to digoxin, avidin conjugated with **polystyrene** beads contg. dioctadecylaminocarboxylbenzal acridan as acceptor beads, and anti-fluorescein monoclonal **antibody** conjugated with **polystyrene** beads contg. tetra-(n-decyl)aluminum phthalocyanin as sensitizing beads. After addn. of the sensitizing beads and incubation in the dark for 30 min at room temp., the reaction mixts. were illuminated for 1 min and chemiluminescence was detd. using a luminometer.

IC ICM C12Q001-00
ICS C12Q001-28; C12N011-00; G01N021-76
NCL 435004000
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 1, 2, 3
IT Chemiluminescence spectroscopy
Liposomes
Luminescence, chemiluminescence
Nucleic acid hybridization
Particles
Test kits
(assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)
IT **Antibodies**
Enamines
Porphyrins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)
IT Lipids, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(bilayer, as suspendable **particles**; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)
IT Intrinsic factors
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(biotinylated monoclonal **antibodies** to; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)
IT **Antibodies**
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(biotinylated, monoclonal; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)
IT **Immunoassay**
(chemiluminescence; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)
IT **Antibodies**
Polynucleotides
Receptors
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(conjugates; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)
IT **Antibodies**
RL: RCT (Reactant); RACT (Reactant or reagent)
(monoclonal; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)
IT Drops
(oil droplets, as suspendable **particles**; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)
IT Latex
(**particles**; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)

IT Avidins
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(**succinylated**; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)

IT 346403-95-0P 346454-39-5P 346454-75-9DP, complex with **polystyrene**, **antibody** conjugates 346490-55-9DP, fluorescein conjugate
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)

IT 105-83-9, Bis-(3-aminopropyl)methylamine 112-99-2, Dioctadecylamine 3301-79-9, 6-Carboxyfluorescein 4480-83-5, Diglycolic anhydride 6066-82-6, N-Hydroxysuccinimide **7300-34-7**, 4,9-Dioxa-1,12-dodecane diamine 9003-53-6D, **Polystyrene**, carboxylate-modified, conjugates 22042-71-3, p-Formylphenoxyacetic acid 30988-17-1, Methyl isocyanatoacetate 51857-17-1 60022-22-2 65674-22-8 72040-63-2 76823-03-5, 5-Carboxyfluorescein 76931-93-6 191671-46-2 346454-75-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)

IT 92557-81-8P 136215-80-0P 199116-58-0DP, **polystyrene**-avidin conjugates 199116-58-0P 251557-55-8P 251557-56-9P 346403-89-2P 346403-90-5P 346403-91-6P 346403-92-7P 346403-94-9P 346403-96-1P 346403-98-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)

IT 2321-07-5, Fluorescein
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(monoclonal **antibody** to; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)

IT 7631-86-9, **Silica**, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(**particles**; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)

IT 574-93-6D, Phthalocyanine, compds., conjugates with **antibody**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(photosensitizers; assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)

IT **7300-34-7**, 4,9-Dioxa-1,12-dodecane diamine
RL: RCT (Reactant); RACT (Reactant or reagent)
(assay compns. and kits using chemiluminescent compds. and photosensitizers activating oxygen to singlet state)

RN 7300-34-7 HCAPLUS
CN 1-Propanamine, 3,3'-[1,4-butanediylbis(oxy)]bis- (9CI) (CA INDEX NAME)

$H_2N-(CH_2)_3-O-(CH_2)_4-O-(CH_2)_3-NH_2$

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 9 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:221918 HCAPLUS
DOCUMENT NUMBER: 134:249193
TITLE: Test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing
INVENTOR(S): Wohlstadter, Jacob N.; Wilbur, James; Sigal, George; Martin, Mark; Guo, Liang-Hong; Fischer, Alan; Leland, Jon; Billadeau, Mark A.
PATENT ASSIGNEE(S): Meso Scale Technologies, LLC, USA
SOURCE: U.S., 103 pp., Cont.-in-part of U.S. 6,066,448.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6207369	B1	20010327	US 1996-715163	19960917
US 6066448	A	20000523	US 1996-611804	19960306
ZA 9601925	A	19970805	ZA 1996-1925	19960308
US 6140045	A	20001031	US 1997-814085	19970306
WO 9812539	A1	19980326	WO 1997-US16942	19970917
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9746495	A1	19980414	AU 1997-46495	19970917
AU 743567	B2	20020131		
ZA 9708380	A	19980417	ZA 1997-8380	19970917
EP 944820	A1	19990929	EP 1997-945249	19970917
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001503856	T2	20010321	JP 1998-514984	19970917
US 6673533	B1	20040106	US 1997-932110	19970917
KR 2000036176	A	20000626	KR 1999-702230	19990316
US 2001021534	A1	20010913	US 2001-771796	20010129

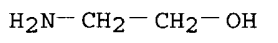
PRIORITY APPLN. INFO.:

US 1995-402076	B2	19950310
US 1995-402277	B2	19950310
US 1996-611804	A2	19960306
US 1996-12957P	P	19960306
US 1996-715163	A	19960917
WO 1997-US16942	W	19970917

AB Materials and methods are provided for producing patterned multi-array, multi-sp. surfaces for use in diagnostics. The invention provides for electrochemiluminescence methods for detecting or measuring an analyte of interest. It also provides for novel electrodes for ECL assays. Materials and methods are provided for the chem. and/or phys. control of conducting domains and reagent deposition for use multiply specific testing procedures. An ECL immunoassay for TSH used a composite electrode of EVA and carbon fibrils. A DNA hybridization assay was performed on a fibril-polymer composite.

IC ICM G01N033-543
ICS G01N033-551
NCL 435006000

CC 9-1 (Biochemical Methods)
Section cross-reference(s): 2, 3
IT Immobilization, biochemical
(**antibody**; test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing)
IT **Immunoassay**
(app.; test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing)
IT **Antibodies**
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses)
(biotinylated; test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing)
IT **Immunoassay**
(chemiluminescence, electrochemiluminescence; test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing)
IT Reagents
RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)
(immobilized on **particles** of porous electrode; test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing)
IT **Antibodies**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(labeled; test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing)
IT **Glass**, uses
RL: DEV (Device component use); USES (Uses)
(slides; test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing)
IT **Particles**
(with immobilized binding reagents; test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing)
IT 7440-57-5, **Gold**, reactions
RL: DEV (Device component use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(electrodes; test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing)
IT 108-30-5, **Succinic** anhydride, reactions 111-88-6, Octylthiol **141-43-5**, Ethanolamine, reactions 530-62-1, 1,1'-Carbonyldiimidazole 1892-57-5, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide 6066-82-6, N-Hydroxysuccinimide 13822-56-5, 3-Aminopropyltrimethoxysilane 103708-09-4, Sulfo-SMCC 192082-40-9, Mercaptoundecanoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing)
IT **141-43-5**, Ethanolamine, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(test kit and electrode sensor for multi-array, multi-specific electrochemiluminescence testing)
RN 141-43-5 HCAPLUS
CN Ethanol, 2-amino- (8CI, 9CI) (CA INDEX NAME)



REFERENCE COUNT: 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 10 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:568970 HCAPLUS
DOCUMENT NUMBER: 129:200179
TITLE: Methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes
INVENTOR(S): Stevens, Raymond; Quan, Cheng
PATENT ASSIGNEE(S): The Regents of the University of California, USA
SOURCE: PCT Int. Appl., 121 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 11
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9836263	A1	19980820	WO 1998-US2777	19980213
W: AU, CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9861627	A1	19980908	AU 1998-61627	19980213
EP 1007943	A1	20000614	EP 1998-906389	19980213
R: CH, DE, FR, GB, LI				

PRIORITY APPLN. INFO.: US 1997-38383P P 19970214
WO 1998-US2777 W 19980213

AB The present invention relates to methods and compns. for the direct detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes. The invention provides biopolymeric materials comprising a plurality of polymd. self-assembling monomers and one or more protein ligands, wherein the biopolymeric materials change color in the presence of analyte. In some embodiments, the protein ligands are selected from the group consisting of peptides, proteins, **antibodies**, receptors, channels, and combinations thereof, although the present invention contemplates all protein ligands. In specific embodiments, the **antibodies** of the presently claimed invention are directed against Chlamydia.

IC ICM G01N021-00
ICS G01N031-20; G01N033-544; G01N033-538; G01N033-53; G01N033-567; G01N033-537; G01N033-543; C12M001-00; C12N001-00; C12N001-20

CC 9-16 (Biochemical Methods)
Section cross-reference(s): 6, 10, 80

IT Amino group
Bacteria (Eubacteria)
Biosensors
Blood
Blood analysis
Bond
Buffers
Carboxyl group
Cell
Chelating agents
Chlamydia
Chromophores
Color
Color reaction
Colorimetry

Coupling agents
Dopants
Drugs
Electron acceptors
Electron donors
Environmental pollution
Escherichia coli
Filters
Formyl group
Fungi
Hepatitis A virus
Hepatitis B virus
Human herpesvirus
Human herpesvirus 3
Human herpesvirus 4
Human immunodeficiency virus
Human poliovirus
Hydrophilicity
Hydrophobicity
Hydroxyl group
Immobilization, biochemical
Immunoassay
Influenza virus
Ions
Molecular topology
Mycobacterium tuberculosis
Neisseria gonorrhoeae
Onchocerca
Parasite
Pathogen
Plasmodium (malarial genus)
Plasmodium falciparum
Rabies virus
Reoviridae
Rhinovirus
Rubella virus
Salmonella
Self-assembly
Self-association
Spectroscopy
Streptococcus
Sulfhydryl group
Surfactants
Toxoplasma gondii
Trypanosoma
Vaccinia virus
Variola virus
Vibrio vulnificus
Virus
(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

IT **Antibodies**
Ligands
Proteins, general, analysis
RL: ANT (Analyte); ARU (Analytical role, unclassified); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); ANST (Analytical study); BIOL (Biological study); PROC (Process)
(methods and compns. for detection of analytes using color changes that

occur in biopolymeric material in response to selective binding of analytes)

IT Alkenes, analysis
Alkynes
Antigens
Carbohydrates, analysis
Cardiolipins
Ceramides
Cerebrosides
Fluoropolymers, analysis
Glass, analysis
Imides
Ion channel
Lysophosphatidylcholines
Mica-group minerals, analysis
Nucleic acids
Phosphatidic acids
Phosphatidylcholines, analysis
Phosphatidylethanolamines, analysis
Phosphatidylglycerols
Phosphatidylinositols
Phosphatidylserines
Polyoxyalkylenes, analysis
Sphingomyelins
Steroids, analysis
Trisaccharides
Urethanes
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

IT 56-40-6D, Glycine, diacetylene derivs., analysis 56-85-9D, L-Glutamine, diacetylene derivs., analysis 56-86-0D, L-Glutamic acid, diacetylene derivs., analysis 56-89-3D, Cystine, diacetylene derivs. 57-88-5, Cholesterol, analysis 62-53-3D, Benzenamine, siloxane derivs., analysis 63-42-3D, Lactose, diacetylene derivs. 63-91-2D, L-Phenylalanine, diacetylene derivs., analysis 71-00-1D, L-Histidine, diacetylene derivs., analysis 73-32-5D, L-Isoleucine, diacetylene derivs., analysis **79-06-1D**, 2-Propenamide, derivs., analysis 83-44-3 109-97-7D, Pyrrole, derivs. 110-02-1D, Thiophene, derivs. 111-87-5, 1-Octanol, analysis 123-78-4, D-Erythro-Sphingosine 151-21-3, analysis 460-12-8D, Diacetylene, derivs. 583-93-7D, 2,6-Diaminopimelic acid, diacetylene derivs. 1121-34-2, Malic anhydride 4067-16-7D, Pentaethylenehexamine, diacetylene derivs. 7440-57-5, **Gold**, analysis 7631-86-9, **Silica**, analysis 9002-84-0, Teflon 9002-88-4 9003-53-6, **Polystyrene** 9012-36-6, Sepharose 9014-76-0, Sephadex 9036-19-5, Octoxynol 18358-13-9D, Methacrylate, derivs., analysis 19295-34-2, Vinylpyridinium 25014-41-9, Polyacrylonitrile 25322-68-3 29557-51-5, Dodecylphosphocholine 37758-47-7, Ganglioside GM1 58846-77-8, Decylglucoside 59247-13-1, Ganglioside GT1b 60676-86-0, **Silica**, vitreous 66990-32-7, 10,12-Pentacosadiynoic acid 120650-77-3 137870-33-8 138305-24-5, 5,7-Pentacosadiynoic acid 144314-93-2 146064-05-3 146064-07-5 155020-22-7 162635-75-8 178560-65-1, 5,7-Docosadiynoic acid 211996-58-6
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

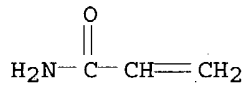
IT 100-58-3 **107-15-3**, 1,2-Ethanediamine, reactions **141-43-5**
, reactions **929-75-9**, Tetraethylene glycol diamine 3282-30-2,
Trimethylacetylchloride 6066-82-6, N-Hydroxy **succinimide**
63488-10-8 81357-07-5 136766-23-9 194152-37-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

IT **929-75-9DP**, Tetraethylene glycol diamine, polydiacetylene derivs.
6066-82-6DP, N-Hydroxy **succinimide**, polydiacetylene derivs.
94598-32-0P 136766-21-7P 146064-08-6P 146064-09-7P 194152-38-0P
194152-39-1P 194152-40-4P 211996-51-9DP, polydiacetylene derivs.
211996-59-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

IT **107-15-3DP**, 1,2-Ethanediamine, polydiacetylene derivs.,
preparation **141-43-5DP**, polydiacetylene derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

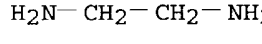
IT **79-06-1D**, 2-Propenamide, derivs., analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

RN 79-06-1 HCAPLUS
CN 2-Propenamide (9CI) (CA INDEX NAME)

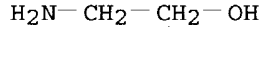


IT **107-15-3**, 1,2-Ethanediamine, reactions **141-43-5**,
reactions **929-75-9**, Tetraethylene glycol diamine
RL: RCT (Reactant); RACT (Reactant or reagent)
(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)

RN 107-15-3 HCAPLUS
CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)

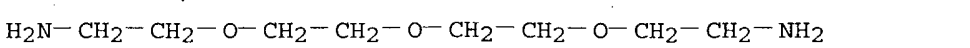


RN 141-43-5 HCAPLUS
CN Ethanol, 2-amino- (8CI, 9CI) (CA INDEX NAME)

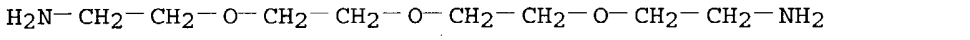


RN 929-75-9 HCAPLUS

CN Ethanamine, 2,2'-[oxybis(2,1-ethanediyloxy)]bis- (9CI) (CA INDEX NAME)



IT **929-75-9DP**, Tetraethylene glycol diamine, polydiacetylene derivs.
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)
RN 929-75-9 HCAPLUS
CN Ethanamine, 2,2'-[oxybis(2,1-ethanediyloxy)]bis- (9CI) (CA INDEX NAME)



IT **107-15-3DP**, 1,2-Ethanediamine, polydiacetylene derivs., preparation **141-43-5DP**, polydiacetylene derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(methods and compns. for detection of analytes using color changes that occur in biopolymeric material in response to selective binding of analytes)
RN 107-15-3 HCAPLUS
CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)

RN 141-43-5 HCAPLUS
CN Ethanol, 2-amino- (8CI, 9CI) (CA INDEX NAME)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 11 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:392158 HCAPLUS
DOCUMENT NUMBER: 129:62029
TITLE: Macrocyclic complexing agents and targeting immunoreagents useful in therapeutic and diagnostic compositions and methods
INVENTOR(S): Snow, Robert A.; Delecki, Daniel J.; Shah, Chandra R.
PATENT ASSIGNEE(S): Nycomed Imaging A/S, Norway
SOURCE: U.S., 60 pp., Cont. of U. S. Ser. No. 13,859, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 5760191	A	19980602	US 1995-392614	19950222
PRIORITY APPLN. INFO.:			US 1993-13859	19930205

OTHER SOURCE(S): MARPAT 129:62029

AB A metal chelate comprising a macrocyclic complexing agent and one or more metal ions which metal ions are a radionucleotide or a paramagnetic metal ion, are claimed as contrasting agents or for immunoassay by ELISA.

IC ICM C07F005-00
ICS C07F013-00; C07D225-00; C07D262-22

NCL 534010000

CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 8, 9, 28

IT Macrocyclic compounds
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(**antibody** conjugate; prepn. and immunoassay by ELISA)

IT **Immunoassay**
(enzyme-linked immunosorbent assay; of macrocyclic compds.-sulfosuccimidinyl 4-(N-maleimidomethyl)cyclohexane-1-carboxylate reaction product conjugate with **antibody** by ELISA)

IT 100-14-1, p-Nitrobenzyl chloride 105-36-2, Ethyl bromoacetate 110-86-1, Pyridine, reactions 123-11-5, 4-Anisaldehyde, reactions 127-19-5, Dimethylacetamide 144-48-9, Iodoacetamide **156-87-6**, 3-Aminopropanol 544-92-3, Cuprous cyanide 626-05-1, 2,6-Dibromopyridine 1122-62-9, 2-Acetylpyridine 4360-63-8, 2-Bromomethyl-1,3-dioxolane 5292-43-3, tert-Butyl bromoacetate 7143-01-3, Methanesulfonic acid anhydride 7677-24-9, Cyanotrimethylsilane 18820-83-2, Pyridinium iodide 34984-16-2, 2,6-Bis(aminomethyl)pyridine 76931-93-6, N-**Succinimidyl**-S-acetylthioacetate 100602-21-9, Pyridinecarbonyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(for prepn. of metal macrocyclic complexes as contrasting agents or for immunoassay by ELISA)

IT 2457-50-3P, 2-Acetylpyridine N-**oxide** 122637-23-4P 137203-72-6P 159307-02-5P 159307-03-6P 159307-06-9P 208757-11-3P 208757-12-4P 208757-13-5P 208757-14-6P 208757-15-7P 208757-17-9P 208757-19-1P 208757-20-4P 208757-21-5P 208757-23-7P 208757-25-9P 208757-26-0P 208757-28-2P 208757-30-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(for prepn. of metal macrocyclic complexes as contrasting agents or for immunoassay by ELISA)

IT 103708-09-4DP, macrocyclic compds. reaction product, **antibody** conjugate 208757-24-8DP, sulfosuccimidinyl 4-(N-maleimidomethyl)cyclohexane-1-carboxylate reaction product, **antibody** conjugate 208757-29-3DP, sulfosuccimidinyl 4-(N-maleimidomethyl)cyclohexane-1-carboxylate reaction product, **antibody** conjugate 208757-30-6DP, sulfosuccimidinyl 4-(N-maleimidomethyl)cyclohexane-1-carboxylate reaction product, **antibody** conjugate
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and immunoassay by ELISA)

IT 7429-91-6DP, Dysprosium, hexaaza macrocyclic compd. complex, preparation 7439-89-6DP, Iron, hexaaza macrocyclic compd. complex, preparation 7439-91-0DP, Lanthanum, hexaaza macrocyclic compd. complex, preparation 7439-92-1DP, Lead, hexaaza macrocyclic compd. complex, preparation 7439-94-3DP, Lutetium, hexaaza macrocyclic compd. complex, preparation 7439-96-5DP, Manganese, hexaaza macrocyclic compd. complex, preparation

7439-98-7DP, Molybdenum, hexaaza macrocyclic compd. complex, preparation
7440-00-8DP, Neodymium, hexaaza macrocyclic compd. complex, preparation
7440-02-0DP, Nickel, hexaaza macrocyclic compd. complex, preparation
7440-10-0DP, Praseodymium, hexaaza macrocyclic compd. complex, preparation
7440-12-2DP, Promethium, hexaaza macrocyclic compd. complex, preparation
7440-18-8DP, Ruthenium, hexaaza macrocyclic compd. complex, preparation
7440-19-9DP, Samarium, hexaaza macrocyclic compd. complex, preparation
7440-20-2DP, Scandium, hexaaza macrocyclic compd. complex, preparation
7440-24-6DP, Strontium, hexaaza macrocyclic compd. complex, preparation
7440-27-9DP, Terbium, hexaaza macrocyclic compd. complex, preparation
7440-30-4DP, Thulium, hexaaza macrocyclic compd. complex, preparation
7440-31-5DP, Tin, hexaaza macrocyclic compd. complex, preparation
7440-45-1DP, Cerium, hexaaza macrocyclic compd. complex, preparation
7440-47-3DP, Chromium, hexaaza macrocyclic compd. complex, preparation
7440-48-4DP, Cobalt, hexaaza macrocyclic compd. complex, preparation
7440-50-8DP, Copper, hexaaza macrocyclic compd. complex, preparation
7440-52-0DP, Erbium, hexaaza macrocyclic compd. complex, preparation
7440-53-1DP, Europium, hexaaza macrocyclic compd. complex, preparation
7440-55-3DP, Gallium, hexaaza macrocyclic compd. complex, preparation
7440-56-4DP, Germanium, hexaaza macrocyclic compd. complex, preparation
7440-60-0DP, Holmium, hexaaza macrocyclic compd. complex, preparation
7440-64-4DP, Ytterbium, hexaaza macrocyclic compd. complex, preparation
7440-65-5DP, Yttrium, complex with macrocyclic compd. reaction product with sulfosuccimidinyl 4-(N-maleimidomethyl)cyclohexane-1-carboxylate, **antibody** conjugate, preparation 7440-65-5DP, Yttrium, hexaaza macrocyclic compd. complex, preparation 7440-66-6DP, Zinc, hexaaza macrocyclic compd. complex, preparation 7440-69-9DP, Bismuth, hexaaza macrocyclic compd. complex, preparation 7440-74-6DP, Indium, hexaaza macrocyclic compd. complex, preparation 10098-91-6DP, Yttrium-90, hexaaza macrocyclic compd. complex, preparation 13981-25-4DP, Copper-64, hexaaza macrocyclic compd. complex, preparation 14133-76-7DP, Technetium-99, hexaaza macrocyclic compd. complex, preparation 14265-75-9DP, Lutetium-177, hexaaza macrocyclic compd. complex, preparation 14274-68-1DP, Yttrium-87, hexaaza macrocyclic compd. complex, preparation 14378-26-8DP, Rhenium-188, hexaaza macrocyclic compd. complex, preparation 14391-94-7DP, Scandium-44, hexaaza macrocyclic compd. complex, preparation 14913-49-6DP, Bismuth-212, hexaaza macrocyclic compd. complex, preparation 14998-63-1DP, Rhenium-186, hexaaza macrocyclic compd. complex, preparation 15092-94-1DP, Lead-212, hexaaza macrocyclic compd. complex, preparation 15750-15-9DP, Indium-111, hexaaza macrocyclic compd. complex, preparation 15757-14-9DP, Gallium-68, hexaaza macrocyclic compd. complex, preparation 15757-86-5DP, Copper-67, hexaaza macrocyclic compd. complex, preparation 208757-24-8DP, yttrium complex
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. as contrasting agent)

IT **156-87-6**, 3-Aminopropanol
RL: RCT (Reactant); RACT (Reactant or reagent)
(for prepn. of metal macrocyclic complexes as contrasting agents or for immunoassay by ELISA)

RN 156-87-6 HCAPLUS
CN 1-Propanol, 3-amino- (8CI, 9CI) (CA INDEX NAME)

$H_2N-CH_2-CH_2-CH_2-OH$

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 12 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:281946 HCAPLUS
DOCUMENT NUMBER: 127:31146
TITLE: Generation and in Situ Evaluation of Libraries of Poly(acrylic acid) Presenting Sialosides as Side Chains as Polyvalent Inhibitors of Influenza-Mediated Hemagglutination
AUTHOR(S): Choi, Seok-Ki; Mammen, Mathai; Whitesides, George M.
CORPORATE SOURCE: Department of Chemistry and Chemical Biology, Harvard University, Cambridge, MA, 02138, USA
SOURCE: Journal of the American Chemical Society (1997), 119(18), 4103-4111
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB This paper describes a simple, microscale method for generating and evaluating libraries of derivs. of poly(acrylic acid) (pAA) that present mixts. of side chains that influence their biol. activity. The method is based on the one-step conversion of poly(acrylic anhydride) (pAAn) to linear polymers presenting multiple units of R on side chains, pAA(R): and the polymers are obtained by ultrasonication of a suspension of pAAn and aq. RNH2 contained in a 250-.mu.L well of a microtiter plate. By using this method, derivs. of pAA having N-acetylneuraminic acid (NeuAc-L-NH2) as a side chain, pAA(NeuAc-L), were generated and assayed for the ability to inhibit hemagglutination (HAI) of chicken erythrocytes by influenza virus A (X-31); the const. (KiHAI) describing this inhibition is calcd. on the basis of the concn. of NeuAc groups in soln., rather than the concn. of polymer mols. Copolymeric pAA(NeuAc-Ln; Ln = different linking groups) with a range of mole fractions of NeuAc-L-NH2 (.chi.NeuAc-L = 0.02-0.11) exhibited HAI activities with KiHAI values between 27 and 0.30 .mu.M. Using combinations of NeuAc-L-NH2 and one of 26 different primary amines RNH2, a variety of ter-polymeric pAA(NeuAc-L; R) (.chi.NeuAc-L .apprx. 0.05; .chi.R .apprx. 0.06) were also generated and assayed. Certain ter-polymers yielded values of KiHAI that were lower by a factor of .apprx.104 than that of the parent co-polymeric pAA(NeuAc-L): the most active inhibitor was pAA(NeuAc-L; L-3-(2'-naphthyl)alanine) (KiHAI .apprxeq. 0.5 nM). Typically, the incorporation of hydrophobic, esp. arom., side chains enhanced activities. These polymers (pAA(NeuAc-L; R)) belong to a new class of polymeric, polyvalent sialosides that are potent inhibitors of the adsorption of influenza virus to erythrocytes. They were active with only low-to-moderate levels of incorporation of functional groups into the side chains: .chi.NeuAc-L .apprx. 0.05; .chi.R .apprx. 0.06.

CC 9-14 (Biochemical Methods)
Section cross-reference(s): 1, 10, 35

IT Bioassay
Combinatorial library
Erythrocyte
Hemagglutination
Influenza A virus
Microtiter plates
Sound and Ultrasound
(prepn. of libraries of poly(acrylic acid) with sialoside side chains as inhibitors of influenza-mediated hemagglutination)

IT 190657-26-2DP, reaction products with poly(N-acryloyloxy) **succinimide**) 190657-29-5DP, reaction products with

poly(N-acryloyloxy)**succinimide**)
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(prepn. of libraries of poly(acrylic acid) with sialoside side chains as inhibitors of influenza-mediated hemagglutination)

IT 60-32-2D, reaction products with polyacrylic anhydride 107-13-1, 2-Propenenitrile, reactions **107-15-3**, 1,2-Ethanediamine, reactions 150-13-0D, 4-Aminobenzoic acid, reaction products with polyacrylic anhydride 768-94-5, 1-Aminoadamantane 828-51-3, Adamantane-1-carboxylic acid 2051-76-5, Acrylic anhydride 2638-94-0 9003-05-8, Poly(acrylamide) 13095-73-3, 4-Mercaptobutanoic acid 25301-00-2, Poly(acrylic anhydride) 37017-08-6D, Poly(N-acryloyloxy) **succinimide**), reaction products with an adamantane amine deriv. 38570-39-7 53733-98-5 58791-49-4, 1,4-Bisbromomethylnaphthalene 69038-04-6 132591-10-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of libraries of poly(acrylic acid) with sialoside side chains as inhibitors of influenza-mediated hemagglutination)

IT **107-15-3**, 1,2-Ethanediamine, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of libraries of poly(acrylic acid) with sialoside side chains as inhibitors of influenza-mediated hemagglutination)

RN 107-15-3 HCAPLUS
CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)

$H_2N-CH_2-CH_2-NH_2$

L39 ANSWER 13 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:826866 HCAPLUS
DOCUMENT NUMBER: 123:275272
TITLE: Effective Inhibitors of Hemagglutination by Influenza Virus Synthesized from Polymers Having Active Ester Groups. Insight into Mechanism of Inhibition
AUTHOR(S): Mammen, Mathai; Dahmann, Georg; Whitesides, George M.
CORPORATE SOURCE: Dep. Chem., Harvard Univ., Cambridge, MA, 02138, USA
SOURCE: Journal of Medicinal Chemistry (1995), 38(21), 4179-90
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Highly effective sialic acid-contg. inhibitors of influenza virus X-31 were synthesized using poly[N-(acryoyloxy)**succinimide**] (pNAS), a polymer preactivated by incorporation of active ester groups. Polymers contg. two and three different components were prepd. by sequential reaction of pNAS with two and three amines, resp. This prepn. of co- and terpolymers was synthetically more efficient than methods involving copolymn. of different monomers and gave polymers that were more easily compared than those generated by copolymn. Polymers in this study (prepd. from a single batch of pNAS) had a const. d.p. (DP .apprxeq. 2000) and probably had a distribution of components that was more random than analogous polymers prepd. by copolymn. Use of C-glycosides of sialic acid made it possible to investigate inhibition by different polymers at temps. ranging from 4 to 36 .degree.C without artifacts due to the hydrolytic action of neuraminidase. The inhibitors were, in general, more effective at 36 .degree.C than at 4 .degree.C. The hemagglutination (HAI) assay was

used to measure a value of the inhibition const. KiHAI for each polymer. The value of KiHAI for the two-component polymer contg. 20% sialic acid on a polyacrylamide backbone at 4 .degree.C was 4 nM (in terms of the sialic acid moieties present in soln.) and was approx. 50-fold more effective than the best inhibitors previously described and 25-fold more effective than the best naturally occurring inhibitor. The most effective inhibitor synthesized in this work contained 10% benzyl amine and 20% sialic acid on a polyacrylamide backbone, and its value of KiHAI was 600 pM at 36 .degree.C. Approx. 100 polymers that differed in one or two components were assayed to distinguish between two limiting mechanisms for inhibition of the interaction between the surfaces of virus and erythrocytes: high-affinity binding through polyvalency, and steric stabilization. The results suggest that both mechanisms play an important role. The system comprising polyvalent inhibitors of **agglutination** of erythrocytes by influenza provides a system that may be useful as a model for inhibitors of other pathogen-host interactions, a large no. of which are themselves polyvalent.

CC 1-5 (Pharmacology)

IT **Hemagglutination**
Molecular structure-biological activity relationship
Virucides and Virustats
(inhibitors of hemagglutination by influenza virus synthesized from polymers having active ester groups)

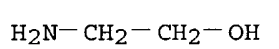
IT 56-40-6DP, Glycine, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 56-84-8DP, Aspartic acid, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 100-46-9DP, Benzyl amine, reaction products with polyacrylamide and acetylneuraminic acid 108-00-9DP, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 108-91-8DP, Cyclohexanamine, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 110-91-8DP, Morpholine, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 111-26-2DP, n-Hexylamine, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 131-48-6DP, N-Acetylneuraminic acid, reaction products with polymers and amines **141-43-5DP**, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 598-41-4DP, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 616-30-8DP, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 768-94-5DP, Tricyclo[3.3.1.13,7]decan-1-amine, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide 929-06-6DP**, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 4795-29-3DP, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide 6338-55-2DP**, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide 7300-34-7DP**, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 9003-05-8DP, Polyacrylamide, reaction products with benzyl amine and acetylneuraminic acid 17768-41-1DP, Tricyclo[3.3.1.13,7]decane-1-methanamine, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 37017-08-6DP, Poly[N-(acryloyloxy)**succinimide**], reaction products with acetylneuraminic acid and amines 58471-53-7DP, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 60537-19-1DP, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 83585-56-2DP, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** 83585-61-9DP, reaction products with acetylneuraminic acid and

poly(acryloyloxy)**succinimide**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(inhibitors of hemagglutination by influenza virus synthesized from polymers having active ester groups)

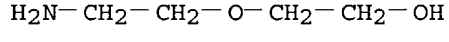
IT 814-68-6, Acryloyl chloride 6066-82-6, N-Hydroxysuccinimide 38862-24-7, N-(Acryloyloxy)**succinimide**
RL: RCT (Reactant); RACT (Reactant or reagent)
(inhibitors of hemagglutination by influenza virus synthesized from polymers having active ester groups)

IT **141-43-5DP**, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** **929-06-6DP**, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** **6338-55-2DP**, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide** **7300-34-7DP**, reaction products with acetylneuraminic acid and poly(acryloyloxy)**succinimide**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(inhibitors of hemagglutination by influenza virus synthesized from polymers having active ester groups)

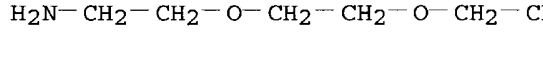
RN 141-43-5 HCAPLUS
CN Ethanol, 2-amino- (8CI, 9CI) (CA INDEX NAME)



RN 929-06-6 HCAPLUS
CN Ethanol, 2-(2-aminoethoxy)- (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 6338-55-2 HCAPLUS
CN Ethanol, 2-[2-(2-aminoethoxy)ethoxy]- (8CI, 9CI) (CA INDEX NAME)



RN 7300-34-7 HCAPLUS
CN 1-Propanamine, 3,3'-[1,4-butanediylbis(oxy)]bis- (9CI) (CA INDEX NAME)

L39 ANSWER 14 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:164735 HCAPLUS
DOCUMENT NUMBER: 118:164735
TITLE: Ion-capture assays using a binding member conjugated to carboxymethylamylose

INVENTOR(S): Adamczyk, Janina; Berry, Daniel S.; Jou, Yi Her; Stroupe, Stephen Denham
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9221772	A1	19921210	WO 1992-US2996	19920410
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
JP 06508213	T2	19940914	JP 1992-500396	19920410
EP 641388	A1	19950308	EP 1992-912697	19920410
EP 641388	B1	19980909		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
AT 170927	E	19980915	AT 1992-912697	19920410
ES 2124734	T3	19990216	ES 1992-912697	19920410
JP 3267614	B2	20020318	JP 1993-500396	19920410
US 5459080	A	19951017	US 1994-187814	19940127

PRIORITY APPLN. INFO.:
US 1991-707726 A 19910530
US 1988-150278 B2 19880129
US 1989-375029 B2 19890707
WO 1992-US2996 W 19920410

AB A specific binding assay uses (1) a capture reagent comprising a 1st analyte-binding member (e.g. **antibody**) conjugated to carboxymethylamylose or other polyanion, (2) an indicator reagent comprising a labeled 2nd analyte-binding member, and (3) a polymeric cation immobilized on a solid phase. The analyte is complexed with the 1st and 2nd binding members, the complex is contacted with the solid phase, and the indicator bound to the solid phase is detected or detd. The polyanion-contg. capture reagent allows the analyte to be bound to and retained on the solid phase even in the presence of other polymeric anions acting as blockers of nonspecific binding. Thus, a sandwich ELISA for carcinoembryonic antigen (CEA) used a capture reagent comprising an anti-CEA **antibody** conjugated by a single attachment site to poly(glutamic acid), an indicator reagent comprising an anti-CEA **antibody** conjugated to alk. phosphatase, and a solid phase comprising Celquat L-200, a quaternary ammonium polymer.

IC ICM C12Q001-25
ICS G01N033-52; G01N033-53; G01N033-543

CC 9-10 (Biochemical Methods)
Section cross-reference(s): 15

ST ion capture immunoassay carboxymethylamylose **antibody**; antigen detn ion capture immunoassay

IT **Immunoassay**
(enzyme, solid-phase ion-capture, **antibody**-polyanion conjugate and immobilized polycation in)

IT Albumins, compounds
RL: ANST (Analytical study)
(reaction products, with azobenzenesulfonic acid and **succinic** anhydride, in human chorionic gonadotropin detn. by ion-capture solid-phase EIA)

IT 7440-57-5, **Gold**, analysis
RL: ANST (Analytical study)
(colloidal **particles**, **antibody**-coated, in chorionic

gonadotropin detn. in human urine by ion-capture solid-phase EIA)
IT 7782-49-2, Selenium, analysis
RL: ANST (Analytical study)
(colloidal **particles**, monoclonal **antibody**-coated, in chorionic gonadotropin detn. in human urine by ion-capture solid-phase EIA)
IT 57-83-0, Progesterone, analysis
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, by ion-capture solid-phase EIA, **antibody** detn. in relation to)
IT 9003-01-4D, Poly(acrylic acid), **antibody** conjugates 24991-23-9D, **antibody** conjugates 25513-46-6D, Poly(glutamic acid), **antibody** conjugates 25608-40-6D, Poly(aspartic acid), **antibody** conjugates 26063-13-8D, Poly(aspartic acid), **antibody** conjugates
RL: ANST (Analytical study)
(in ion-capture solid-phase EIA)
IT **107-15-3D**, Ethylenediamine, fluorescein derivs. 2321-07-5D, Fluorescein, ethylenediamine derivs.
RL: ANST (Analytical study)
(poly(glutamic acid) deriv. labeling with)
IT 64987-85-5D, **antibody** conjugates
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with anionically modified albumin for ion-capture solid-phase EIA)
IT 4044-65-9D, 1,4-Phenylenediisothiocyanate, poly(glutamic acid) conjugates
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **antibody** for ion-capture solid-phase EIA)
IT 108-30-5D, **Succinic** anhydride, albumin conjugates, uses
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with azobenzenesulfonic acid in polyanion prepn. for ion-capture solid-phase EIA)
IT 2779-21-7, p-Azobenzenesulfonic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **succinylated** albumin in polyanion prepn. for ion-capture solid-phase EIA)
IT **107-15-3D**, Ethylenediamine, fluorescein derivs.
RL: ANST (Analytical study)
(poly(glutamic acid) deriv. labeling with)
RN 107-15-3 HCAPLUS
CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)

$H_2N-CH_2-CH_2-NH_2$

L39 ANSWER 15 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:143000 HCAPLUS
DOCUMENT NUMBER: 118:143000
TITLE: Reagents containing a nonspecific binding blocker in ion-capture binding assays
INVENTOR(S): Adamczyk, Janina; Berry, Daniel S.; Fico, Rosario; Jou, Yi Her; Stroupe, Stephen D.
PATENT ASSIGNEE(S): Abbott Laboratories, USA
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9221769	A1	19921210	WO 1992-US2979	19920410
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
EP 586590	A1	19940316	EP 1992-913618	19920410
EP 586590	B1	19990707		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06508210	T2	19940914	JP 1992-500393	19920410
AT 181965	E	19990715	AT 1992-913618	19920410
ES 2136090	T3	19991116	ES 1992-913618	19920410
JP 3267613	B2	20020318	JP 1993-500393	19920410
PRIORITY APPLN. INFO.:			US 1991-707372 A	19910530
			WO 1992-US2979 W	19920410

AB A specific binding assay uses (1) a capture reagent comprising a 1st analyte-binding member (e.g. **antibody**) conjugated to a polyanion, (2) an indicator reagent comprising a labeled 2nd analyte-binding member, (3) a polymeric cation immobilized on a solid phase, and (4) a blocker of nonspecific binding comprising an unbound polyanion. The analyte is complexed with the 1st and 2nd binding members, and the complex is contacted with the solid phase; the indicator binds to the solid phase, even in the presence of the blocker, and bound indicator is detected or detd. The blocker is a sep. reagent or is included in the indicator reagent or the capture reagent; suitable blockers include dextran sulfate, heparin, carboxymethyldextran, CM-cellulose, pentosan polysulfate, inositol hexasulfate, and .beta.-cyclodextrin sulfate. Thus, a sandwich ELISA for TSH used a capture reagent comprising a monoclonal anti-TSH **antibody** conjugated to carboxymethylamylose, an indicator reagent comprising an **antibody** to the .beta. chain of human chorionic gonadotropin conjugated to alk. phosphatase, a solid phase coated with Merquat 100 (a quaternary ammonium polymer), and dextran sulfate as blocker of nonspecific binding to the solid phase.

IC ICM C12Q001-00
ICS C12Q001-68; G01N033-53; G01N033-536; G01N033-537; G01N033-538; G01N033-541; G01N033-543; G01N033-544; G01N033-546; G01N033-551; G01N033-553; C11D003-07; C11D003-066

CC 9-10 (Biochemical Methods)

IT **Immunoassay**
(enzyme, solid-phase ion-capture, **antibody**-polyanion conjugate and immobilized polycation in)

IT Albumins, compounds
RL: ANST (Analytical study)
(reaction products, with azobenzenesulfonic acid and **succinic** anhydride, in human chorionic gonadotropin detn. by ion-capture solid-phase EIA)

IT 7440-57-5, **Gold**, analysis 7782-49-2, Selenium, analysis
RL: ANST (Analytical study)
(colloidal **particles**, monoclonal **antibody**-coated, in chorionic gonadotropin detn. in human urine by ion-capture solid-phase EIA)

IT 57-83-0, Progesterone, analysis
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, by ion-capture solid-phase EIA, **antibody** detn. in relation to)

IT 12768-31-9D, Carboxymethylamylose, conjugates with monoclonal **antibody**

RL: ANST (Analytical study)
(in TSH detn. by ion-capture solid-phase EIA)
IT 9003-01-4D, Poly(acrylic acid), **antibody** conjugates
24991-23-9D, **antibody** conjugates 25513-46-6D, Poly(glutamic acid), **antibody** conjugates 25608-40-6D, Poly(aspartic acid), **antibody** conjugates 26063-13-8D, Poly(aspartic acid), **antibody** conjugates
RL: ANST (Analytical study)
(in ion-capture solid-phase EIA)
IT **107-15-3D**, 1,2-Ethanediamine, fluorescein derivs. 2321-07-5D, Fluorescein, ethylenediamine derivs.
RL: ANST (Analytical study)
(poly(glutamic acid) deriv. labeling with)
IT 64987-85-5D, **antibody** conjugates
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with anionically modified albumin for ion-capture solid-phase EIA)
IT 4044-65-9D, 1,4-Phenylenediisothiocyanate, polyl(glutamic acid) conjugates
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **antibody** for ion-capture solid-phase EIA)
IT 108-30-5D, **Succinic** anhydride, albumin conjugates
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with azobenzenesulfonic acid in polyanion prepn. for ion-capture solid-phase EIA)
IT 2779-21-7, p-Azobenzenesulfonic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **succinylated** albumin in polyanion prepn. for ion-capture solid-phase EIA)
IT **107-15-3D**, 1,2-Ethanediamine, fluorescein derivs.
RL: ANST (Analytical study)
(poly(glutamic acid) deriv. labeling with)
RN 107-15-3 HCAPLUS
CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)

$H_2N-CH_2-CH_2-NH_2$

L39 ANSWER 16 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:122967 HCAPLUS
DOCUMENT NUMBER: 118:122967
TITLE: Immunoassay for immunoglobulins
INVENTOR(S): Rejman, John J.; Weng, Litai; Choo, Sae H.
PATENT ASSIGNEE(S): Syntex (U.S.A.), Inc., USA
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

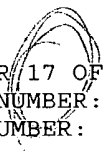
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 507586	A2	19921007	EP 1992-302912	19920402
EP 507586	A3	19930303		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE
PRIORITY APPLN. INFO.: US 1991-679270 19910403
AB An immunoassay for a specific Ig comprises (1) combining (a) a sample

suspected of contg. Ig, (b) a small mol. bound to a 1st antigen capable of binding to the Ig, (c) a signal-generating means bound to a 2nd antigen capable of binding to the Ig, and (d) a support to which is bound a receptor for the small mol. in an aq. medium; (2) incubating the combination; (3) sepg. the medium and the support; and (4) observing the medium or the support for the presence or amt. of a signal, the presence or amt. thereof being related to the presence or amt. of the Ig in the sample. A heterogeneous enzyme-based immunoassay for detection of IgG for hepatitis B surface antigen (HBsAg) involved (1) incubating avidin bound to **glass** beads, biotin-HBsAg conjugate, HBsAg-fluorescein conjugate, anti-fluorescein **antibody**-horseradish peroxidase conjugate, and blood serum samples (or std.); (2) washing away unbound reagents; (3) adding substrate for generating color (TMB/urea H2O2); (4) stopping the developing reaction with H2SO4; and (5) reading the optical d. at 450 nM.

IC ICM G01N033-68
ICS G01N033-576
ICA G01N033-543
CC 15-1 (Immunochemistry)
Section cross-reference(s): 9
ST immunoassay Ig **antibody**; hepatitis B surface antigen IgG EIA
IT **Immunoassay**
(Igs detection by)
IT Disease
(detection of, immunoassay for **antibody** for)
IT **Antibodies**
Immunoglobulins
RL: BIOL (Biological study)
(immunoassay for)
IT Diagnosis
(immunoassay for **antibody** for)
IT **Particles**
(metals, conjugates with antigen, for Ig immunoassay)
IT **Glass, oxide**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(conjugates, receptor, in Ig immunoassay)
IT **Immunoassay**
(enzyme, for Igs)
IT Virus, animal
(hepatitis B, **antibodies** to, detection of, by immunoassay)
IT 146420-80-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with **succinimidyl** maleimidomethyl cyclohexane carboxylate)
IT **2752-17-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with carboxyfluorescein)
IT 919-30-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **glass** beads, in prepn. of avidinated **glass** beads for IgG EIA)
IT **2752-17-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with carboxyfluorescein)
RN 2752-17-2 HCAPLUS
CN Ethanamine, 2,2'-oxybis- (9CI) (CA INDEX NAME)

$H_2N-CH_2-CH_2-O-CH_2-CH_2-NH_2$



L39 ANSWER 17 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:3422 HCAPLUS
DOCUMENT NUMBER: 118:3422
TITLE: Method for specific binding assays using a releasable ligand
INVENTOR(S): Obzansky, David Michael; Simons, Donald Max; Tseng, Susan Yen Tee
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

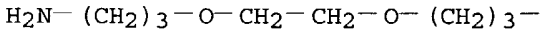
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9216841	A1	19921001	WO 1992-US1656	19920312
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
CA 2106003	AA	19920913	CA 1992-2106003	19920312
EP 579676	A1	19940126	EP 1992-908269	19920312
EP 389585	B1	19961030		
R: DE, FR, GB, IT				
JP 06505802	T2	19940630	JP 1992-507845	19920312
US 5332679	A	19940726	US 1993-29971	19930212

PRIORITY APPLN. INFO.: US 1991-670459 19910312
WO 1992-US1656 19920312

AB Immunoassays and DNA probe assays are disclosed which use a nonimmune, reversible binding displacement system. In the assay, a releasable ligand, a binding partner for the releasable ligand, an analyte, an anal. detectable (reporter) group, and .gtoreq.1 binding partner(s) for the analyte are 1st attached to an insol. phase to form reporter-labeled complex bound to an insol. phase, followed by addn. of a displacer ligand which displaces the releasable ligand along with some portion of the reporter-labeled complex, so that the released reporter is anal. detectable in a free liq. medium and can be related to the concn. of analyte in the sample. Among the methods described is the detn. of TSH by measurement of an enzyme-labeled complex released from a solid support in a noncompetitive immunoassay using dethiobiotin as releasable ligand and biotin as displacer ligand. The effect of a hydrophilic spacer in an enzyme-labeled complex was also studied.

IC ICM G01N033-543
CC 9-10 (Biochemical Methods)
Section cross-reference(s): 2, 3
IT **Antibodies**
RL: ANST (Analytical study)
(as immobilized binding partner, for reversible binding displacement system with releasable ligand and displacer ligand for immunoassay)
IT **Particles**
(chromium dioxide, anti-TSH **antibody** immobilized on, in TSH immunoassay with releasable ligand and displacer ligand)
IT **Immunoassay**
Nucleic acid hybridization
(reversible binding displacement system with releasable ligand and

displacer ligand for)
IT **Antibodies**
RL: ANST (Analytical study)
(to TSH, conjugates, with dethiobiotin, for TSH immunoassay with displacer ligand and releasable ligand)
IT Avidins
RL: ANST (Analytical study)
(**succinylated**, as immobilized binding partner, for reversible binding displacement system with releasable ligand and displacer ligand for immunoassay or nucleic acid hybridization assay)
IT 533-48-2D, Dethiobiotin, anti-TSH **antibody** conjugates
9031-11-2D, .beta.-Galactosidase, anti-TSH **antibody** conjugates
RL: ANST (Analytical study)
(for TSH immunoassay with displacer ligand and releasable ligand)
IT 9001-78-9D, streptavidin conjugates 9013-20-1D, Streptavidin, alk. phosphatase conjugates 144923-24-0D, reaction products with anti-TSH **antibody** and dethiobiotin
RL: ANST (Analytical study)
(in TSH immunoassay with releasable ligand and displacer ligand)
IT 12018-01-8, Chromium dioxide
RL: ANST (Analytical study)
(**particles**, anti-TSH **antibody** immobilized on, in TSH immunoassay with releasable ligand and displacer ligand)
IT 144923-24-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for spacer for anti-TSH **antibody**-dethiobiotin conjugate, for TSH immunoassay with releasable ligand and displacer ligand)
IT 108-30-5, **Succinic** anhydride, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with ethylene glycol bis(aminopropyl)ether)
IT **2997-01-5**, Ethylene glycol bis(3-aminopropyl)ether
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **succinic** anhydride)
IT **2997-01-5**, Ethylene glycol bis(3-aminopropyl)ether
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **succinic** anhydride)
RN 2997-01-5 HCAPLUS
CN 1-Propanamine, 3,3'-[1,2-ethanediylbis(oxy)]bis- (9CI) (CA INDEX NAME)



L39 ANSWER 18 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:578873 HCAPLUS
DOCUMENT NUMBER: 115:178873
TITLE: Non-porous beads and aspiration tube for easy separation in heterogeneous binding assays using specific binding pair
INVENTOR(S): Watts, Richard P.; Kirakossian, Hrair; Ericson, Mary C.; Chang, Chiu Chin
PATENT ASSIGNEE(S): Syntex (U.S.A.), Inc., USA
SOURCE: Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 411944	A2	19910206	EP 1990-308527	19900802
EP 411944	A3	19911030		
EP 411944	B1	19980610		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
CA 2022518	AA	19910205	CA 1990-2022518	19900802
AT 167302	E	19980615	AT 1990-308527	19900802
JP 03095463	A2	19910419	JP 1990-206627	19900803
US 5437983	A	19950801	US 1993-13116	19930201

PRIORITY APPLN. INFO.: US 1989-389452 19890804

AB Non-porous beads with size 0.2-2.5 mm and aspiration tube contg. .gtoreq.1 orifices having a diam. <0.2 mm are used for carrying out sepn. in heterogeneous binding assays using specific binding pairs. The specific binding pair member is **antibody**, enzyme conjugate, or hapten. Thus, for detection of digoxin, (1) digoxin was labeled with horseradish peroxidase (HRP) through **succinyl**-oxybis(ethylamide)linkage; (2) anti-digoxin **antibody** was raised and conjugated with biotin; (3) digoxin was attached to 6-carboxyfluorescein through carboxymethyl oxime-3,3'-diamino-N-methyldipropylamine bridge; (4) anti-fluorescein **antibody** was conjugated with HRP; and (5) avidin was immobilized on 0.75 mm **glass** beads coated with aminopropyltriethoxysilane.

IC ICM G01N033-538
ICS G01N033-546

CC 9-10 (Biochemical Methods)
Section cross-reference(s): 15

ST nonporous bead heterogeneous binding assay; aspiration tube heterogeneous binding assay; specific binding pair binding assay; bead tube aspiration sepn immunoassay; heterogeneous binding assay **antibody** hapten; enzyme immunoassay heterogeneous aspiration sepn

IT Avidins
RL: ANST (Analytical study)
(aminopropyltriethoxysilane or CM-dextran coated **glass** beads conjugate with, in enzyme immunoassay using sp. binding pair)

IT **Antibodies**
Haptens
RL: ANST (Analytical study)
(as member of sp. binding pair, ligand binding assay with, nonporous bead and aspiration tube for easy sepn. in relation to)

IT **Glass, oxide**
RL: ANST (Analytical study)
(beads, nonporous, aspiration tube and, for easy sepn. in sp. binding pair assays)

IT **Immunochemical analysis**
(**enzyme immunoassay**, with sp. binding pair, non-porous beads and aspiration tube for easy sepn. in)

IT 2321-07-5
RL: ANST (Analytical study)
(**antibody** to, peroxidase conjugate with, in digoxin detn. by heterogeneous binding assay using specific binding pair)

IT 9044-05-7
RL: ANST (Analytical study)
(**glass** beads coated with, for immobilizing avidin, for T3 detn.)

IT 919-30-2
RL: ANST (Analytical study)
(**glass** beads coated with, for immobilizing avidin, for

digoxin detn.)
IT 58-85-5DP, Biotin, conjugate with anti-digoxin **antibody**
9003-99-0DP, Peroxidase, conjugates with anti-fluorescein **antibody**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for digoxin detn. by heterogeneous binding assay using specific binding pair)
IT **2752-17-2**, 2,2'-Oxybis(ethylamine) 9003-99-0D, Peroxidase, **succinylated** 20830-75-5D, Digoxin, reaction product with N-**succinimide**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in prepn. of peroxidase labeled digoxin, for digoxin detn. by heterogeneous binding assay using specific binding pair)
IT **2752-17-2**, 2,2'-Oxybis(ethylamine)
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in prepn. of peroxidase labeled digoxin, for digoxin detn. by heterogeneous binding assay using specific binding pair)
RN 2752-17-2 HCAPLUS
CN Ethanamine, 2,2'-oxybis- (9CI) (CA INDEX NAME)

$H_2N-CH_2-CH_2-O-CH_2-CH_2-NH_2$

L39 ANSWER 19 OF 23. HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1990:529004 HCAPLUS
DOCUMENT NUMBER: 113:129004
TITLE: Carrier **particles**, method for preparation thereof, and their use in **agglutination** immunoassays
INVENTOR(S): Hirai, Takenori; Ihara, Hirotaka; Hirayama, Chuichi; Fuzita, Haruo; Saisho, Munehiro
PATENT ASSIGNEE(S): Chemo-Sero-Therapeutic Research Institute, Japan
SOURCE: Eur. Pat. Appl., 17 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 363921	A2	19900418	EP 1989-118879	19891011
EP 363921	A3	19911127		
EP 363921	B1	19960925		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 02103470	A2	19900416	JP 1988-258004	19881012
JP 07009429	B4	19950201		
AT 143388	E	19961015	AT 1989-118879	19891011
ES 2091758	T3	19961116	ES 1989-118879	19891011
CA 2000547	AA	19900412	CA 1989-2000547	19891012
CA 2000547	C	19961105		
US 5059542	A	19911022	US 1989-420531	19891012

PRIORITY APPLN. INFO.: JP 1988-258004 19881012
AB The title **particles** comprise an anionic polymer and a synthetic polyamino acid having .gtoreq.1 amino group in its side chain, the complex being insolubilized by an aldehyde crosslinking agent. The carrier **particles** are useful in immunoassays, esp. **particle** immunoassays. Prepn. of the **particles** is described. Thus, the

Na salt of poly(L-glutamic acid)-poly(L-lysine) copolymer was prepd. and further reacated with gum arabic, then with glutaraldehyde. The coacervate formed at pH 6.01. When the synthetic **particles** of the invention were coated with e.g. hepatitis .beta. core antigen and used in an **agglutination** immunoassay, the endpoint achieved was equal to or superior to that obtained using fixed steep erythrocytes as carriers. In addn., the assay was finished in 60-80 min using the synthetic **particles**, compared to 90-120 min to complete the assay using fixed sheep erythrocytes.

IC ICM G01N033-53
ICS C08F008-28

CC 9-10 (Biochemical Methods)

ST carrier **particle agglutination** immunoassay reagent; glutamate lysine copolymer gum arabic **particle**; polymer polyamino acid **particle**; hepatitis B core antigen **particle** immunoassay

IT Crosslinking agents
(aldehydes as, for prepg. carrier **particles** contg. anionic polymer and polyamino acid for **agglutination** immunoassay)

IT Aldehydes, uses and miscellaneous
RL: USES (Uses)
(as crosslinking agents, in prepg. carrier **particles** contg. anionic polymer and polyamino acid for **agglutination** immunoassay)

IT Albumins, biological studies
RL: BIOL (Biological study)
(carrier **particle** coated with, for **agglutination** immunoassay)

IT Antigens
RL: ANST (Analytical study)
(carrier **particle** coated with, of human immunodeficiency virus, for **agglutination** immunoassay)

IT Peptides, uses and miscellaneous
Polysaccharides, uses and miscellaneous
RL: SPN (Synthetic preparation); PREP (Preparation)
(in carrier **particle** prepn. for **agglutination** immunoassay)

IT Blood analysis
(**particle agglutination** test in, carrier **particle** prepn. for)

IT **Antibodies**
RL: ANST (Analytical study)
(to hepatitis B surface antigen, carrier **particle** coated with, for **agglutination** immunoassay)

IT Polyelectrolytes
(anionic, in carrier **particle** prepn. for **agglutination** immunoassay)

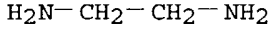
IT Virus, animal
(hepatitis B, surface and core antigen of, carrier **particle** coated with, for **agglutination** immunoassay)

IT Antigens
RL: ANST (Analytical study)
(hepatitis B core, carrier **particle** coated with, for **agglutination** immunoassay)

IT Antigens
RL: ANST (Analytical study)
(hepatitis B surface, carrier **particle** coated with, for **agglutination** immunoassay)

IT **Immunochemical analysis**

(**particle agglutination test**, carrier **particle** prepn. for)
IT 111-30-8, Glutaraldehyde
RL: ANST (Analytical study)
(as crosslinking agent, in carrier **particle** prepn. for **agglutination** immunoassay)
IT 9000-01-5, Gum arabic
RL: ANST (Analytical study)
(in carrier **particle** prepn. for **agglutination** immunoassay)
IT 26247-79-0, Sodium polyglutamate
RL: ANST (Analytical study)
(in prepn. of carrier **particle** for **agglutination** immunoassay)
IT 31370-19-1P, Glutamic acid-leucine copolymer
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for carrier **particle** for **agglutination** immunoassay)
IT 24991-23-9DP, amino derivs. 27456-64-0P 38000-06-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, in carrier **particle** prepn. for **agglutination** immunoassay)
IT 1676-86-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with benzylglutamic carboxy anhydride, in carrier **particle** prepn. for **agglutination** immunoassay)
IT 3190-71-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with carbobenzoxylysine carboxy anhydride, in carrier **particle** prepn. for **agglutination** immunoassay)
IT 25036-43-5, Ajicoat A-2000
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with ethylene diamine, in carrier **particle** prepn. for aggulutination immunoassay)
IT 108-30-5, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with polylysine bromate, in carrier **particle** prepn. for **agglutination** immunoassay)
IT **107-15-3**, 1,2-Ethanediamine, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with polymethylglutamate, in carrier **particle** prepn. for **agglutination** immunoassay)
IT 26588-20-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with **succinic** anhydride, in carrier **particle** prepn. for **agglutination** immunoassay)
IT **107-15-3**, 1,2-Ethanediamine, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with polymethylglutamate, in carrier **particle** prepn. for **agglutination** immunoassay)
RN 107-15-3 HCAPLUS
CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)



L39 ANSWER 20 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1989:512018 HCAPLUS
DOCUMENT NUMBER: 111:112018
TITLE: **Agglutination** immunoassay and kit for determination of a multivalent immune species using a buffered salt wash solution
INVENTOR(S): Snyder, Brian Anthony; Belly, Robert Troconis
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: Eur. Pat. Appl., 9 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 280559	A2	19880831	EP 1988-301654	19880226
EP 280559	A3	19900919		
EP 280559	B1	19931020		
R: CH, DE, FR, GB, LI, SE				
US 4847199	A	19890711	US 1987-19850	19870227
CA 1308349	A1	19921006	CA 1987-539760	19870616
JP 63229366	A2	19880926	JP 1988-42396	19880226

PRIORITY APPLN. INFO.: US 1987-19850 19870227

AB A test kit is used in an **agglutination** immunoassay to det. a multivalent immune species, such as Streptococcus A antigen, in a biol. sample. The method includes contacting an aq. soln. of the species with an **agglutination** indicator reagent having receptor mols. reactive with the species to form an **agglutinate** of the reaction product of species and receptor. These receptor mols. are bound to polymeric **particles** which contain tracer mols. The resulting **agglutinate** is captured on a microporous membrane which has an av. pore size which is .gtoreq.5 times greater than the av. diam. of the polymeric **particles**. Unagglutinated residual materials are washed through the membrane using a wash soln. which has a pH of 5-10 and an ionic strength .gtoreq.0.25. Tracer is then detd. either in the **agglutinate** or in the residual materials. The test kit includes the **agglutination** indicator reagent, the wash soln. and optionally an extn. compn. To prep. an **agglutination** reagent, Oil Red EGN was incorporated into core-shell polymer **particles** composed of a **styrene**-2-acetoacetoxyethyl methacrylate copolymer core, and an m,p-chloromethylsytrene homopolymer shell. Streptococcus A antigen monoclonal **antibodies** were covalently linked to the **particles**, which were then treated with **succinic** anhydride. The antigen was extd. from a clin. isolate with equal vols. of NaNO2 (8 m) and citric acid (0.2M) and then neutralized with 3-(N-morpholino)propanesulfonic acid buffer (2M, pH 7.5) contg. EDTA (75 mM). A mixt. of NaCl (80 .mu.L, 1M), **agglutination** reagent (40 .mu.L) and extd. antigen (80 .mu.L, .apprx.4.2 .times. 10^5 CFU/mL) was added to the test well of a device contg. a nylon 66 membrane (5 .mu.m), incubated 2 min. at 25.degree., and allowed to drain through. Controls used distd. H2O and NaCl 0.025M as wash solns. The amt. of dye remaining on the membrane was measured at 540 nm by reflectance spectrophotometry. The 2 controls did not show adequate detention of the dye.

IC ICM G01N033-546
ICS G01N033-569
CC 9-10 (Biochemical Methods)
ST immune substance **particle agglutination** test membrane; **antibody** polymer conjugate antigen detn membrane; Streptococcus A

agglutination test membrane
IT Dyes
(complexes with polymers, in Streptococcus A antigen detn. by **agglutination** test)
IT Receptors
RL: ANST (Analytical study)
(conjugates with water-insol. **particles**, multivalent immune substance detn. by **agglutination** test using)
IT Antigens
RL: ANST (Analytical study)
(of Streptococcus A, detn. of, by **agglutination** test, **antibody**-polymer conjugates for)
IT Neisseria gonorrhoeae
(serogroup B antigens of, detn. of, by **agglutination** test, **antibody**-polymer conjugates for)
IT **Antibodies**
RL: ANST (Analytical study)
(to Streptococcus A, conjugates with polymers, Streptococcus A antigen detn. by **agglutination** test using)
IT Antigens
RL: ANST (Analytical study)
(PIB, of Neisseria gonorrhoeae, detn. of, by **agglutination** test, **antibody**-polymer conjugates for)
IT **Immunochemical analysis**
(**agglutination test**, multivalent immune substance detn. by, water-insol. **particle**-receptor-mol. conjugates for)
IT Polymers, compounds
RL: ANST (Analytical study)
(conjugates, with **antibodies** to Streptococcus A, Streptococcus A antigen detn. by **agglutination** test using)
IT Streptococcus
(group A, antigens of, detn. of, by **agglutination** test, **antibody**-polymer conjugates for)
IT Filters and Filtration apparatus
(membranes, in multivalent immune substance detn. by **agglutination**)
IT **Antibodies**
RL: ANST (Analytical study)
(monoclonal, to Streptococcus A antigen, conjugates with **polychloromethylstyrene**, Streptococcus A antigen detn. by **agglutination** test using)
IT 78-50-2, Trioctylphosphine **oxide** 14054-87-6
RL: ANST (Analytical study)
(complexes with **styrene** copolymer, in Neisseria gonorrhoeae PIB antigen detn. by **agglutination** test)
IT 9002-61-3, Chorionic gonadotropin
RL: ANST (Analytical study)
(detn. of human, by **agglutination** test, **antibody**-polymer conjugates for)
IT 122458-46-2D, monoclonal **antibody** conjugates
RL: ANST (Analytical study)
(in human chorionic gonadotropin detn. by **agglutination** test)
IT 4477-79-6D, Oil Red EGN, complexes with **styrene** polymers 122458-43-9
RL: ANST (Analytical study)
(in Streptococcus A antigen detn. by **agglutination** assay)
IT 108-30-5D, **Succinic** anhydride, **antibody** reaction products 122458-44-0D, monoclonal **antibody** conjugates 7647-14-5, Sodium chloride, uses and miscellaneous

RL: ANST (Analytical study)
(in Streptococcus A antigen detn. by **agglutination** test)
IT 122458-45-1D, monoclonal **antibody** conjugates
RL: ANST (Analytical study)
(Neisseria gonorrhoeae PIB antigen detn. by **agglutination** test using)
IT 60-00-4D, ethanolamine reaction products **141-43-5D**, Ethanolamine, EDTA reaction products
RL: ANST (Analytical study)
(Neisseria gonorrhoeae PIB antigen extn. with)
IT **141-43-5D**, Ethanolamine, EDTA reaction products
RL: ANST (Analytical study)
(Neisseria gonorrhoeae PIB antigen extn. with)
RN 141-43-5 HCAPLUS
CN Ethanol, 2-amino- (8CI, 9CI) (CA INDEX NAME)

$H_2N-CH_2-CH_2-OH$

L39 ANSWER 21 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1987:614503 HCAPLUS
DOCUMENT NUMBER: 107:214503
TITLE: Diagnostic reagents containing textile-hydrazide-linked **antibodies** or antigens
INVENTOR(S): Quash, Gerard Anthony
PATENT ASSIGNEE(S): Institut National de la Sante et de la Recherche Medicale (INSERM), Fr.
SOURCE: Fr. Demande, 44 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2590674	A1	19870529	FR 1985-17377	19851125
FR 2590674	B1	19890303		
US 4853326	A	19890801	US 1986-928631	19861118
WO 8703206	A1	19870604	WO 1986-US2524	19861121
W: AU, BR, DK, FI, JP, NO				
AU 8767231	A1	19870701	AU 1987-67231	19861121
AU 592142	B2	19900104		
JP 63501980	T2	19880804	JP 1986-506371	19861121
WO 8703372	A1	19870604	WO 1986-FR399	19861124
W: JP, US				
ZA 8608886	A	19870826	ZA 1986-8886	19861124
JP 63502927	T2	19881027	JP 1986-506229	19861124
EP 229546	A1	19870722	EP 1986-402610	19861125
EP 229546	B1	19910911		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
EP 230166	A1	19870729	EP 1986-402611	19861125
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 67314	E	19910915	AT 1986-402610	19861125
ES 2038597	T3	19930801	ES 1986-402610	19861125
FI 8703233	A	19870723	FI 1987-3233	19870723
NO 8703102	A	19870723	NO 1987-3102	19870723

NO 171476	B	19921207		
NO 171476	C	19930317		
AU 8942833	A1	19900405	AU 1989-42833	19891012
PRIORITY APPLN. INFO.:			FR 1985-17377	19851125
			US 1986-928631	19861118
			WO 1986-US2524	19861121
			WO 1986-FR399	19861124
			EP 1986-402610	19861125

AB New diagnostic reagents esp. for virol. comprise a solid support composed of a layer of appropriate textile material fixed to an inert thermoplastic layer e.g. PVC, **polystyrene**; the textile layer has lateral chains with hydrazine derivs. which are chem. linked to antigens or **antibodies**. The reagents are prepd. and used in test kits and immunoassays to detect **antibodies** or antigens in a biol. fluid e.g. serum. Nylon fixed to a PVC support was treated with **succinic** anhydride for a night at pH 9.0 and then was contacted with hydrazine and 1-ethyl-3,3-dimethylaminopropylcarbodiimide at pH 7.5 overnight at 4.degree. with agitation. Oxidized cytomegaloviral (CMV) antigen, prepd. from homogenates of human embryonic fibroblasts MRC5 infected 6-8 d with CMV, was coupled to the nylon-acid hydrazide bands and used in an ELISA to detect neutralizing CMV **antibodies** in serum.

IC ICM G01N033-544

CC 9-10 (Biochemical Methods)
Section cross-reference(s): 15

ST ELISA support reagent; **antibody** cytomegalovirus detn serum
ELISA; virus cytomegalo **antibody** detn serum

IT Blood analysis
Body fluid
Urine analysis
(**antibodies** or antigens detection in, ELISA support reagents for)

IT Bacteria
Virus
(**antibodies** to, detn. of, ELISA reagents for)

IT Deoxyribonucleic acids
Polyamines
RL: ANST (Analytical study)
(**antibodies** to, detn. of, in human serum, by ELISA reagents)

IT Salmonella
(**antibodies** to, oxidized and reaction products with biotin and textile-hydrazides of, as ELISA reagents)

IT **Antibodies**
Antigens
Haptens
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in biol. fluid by ELISA, reagents for)

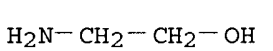
IT Proteins, specific or class
RL: ANST (Analytical study)
(A, **antibodies** to, detn. of, in human serum, by ELISA reagents)

IT Virus, animal
(cytomegalo-, oxidized and immobilized antigen of, as ELISA reagent for **antibody** detn.)

IT **Immunochemical analysis**
(**enzyme-linked immunosorbent assay, antibodies** or antigens detection by, support reagents for)

IT Amino acids, compounds
RL: ANST (Analytical study)

(mercapto, reaction products, with textiles and **antibodies** or antigens, as ELISA reagents)
IT Hydrazides
RL: ANST (Analytical study)
(reaction products, with **antibodies** or antigens, as ELISA reagents)
IT Polyamide fibers, compounds
Polyesters, compounds
RL: ANST (Analytical study)
(reaction products, with hydrazides and antigens or **antibodies**, as ELISA reagents)
IT **141-43-5D**, reaction products with nitrocellulose-acid hydrazide
RL: ANST (Analytical study)
(as ELISA reagent)
IT 52-90-4D, reaction products with textiles and **antibodies** or antigens 58-85-5D, Biotin, reaction products with textile-hydrazides-oxidized to Salmonella 71-44-3D, Spermine, reaction products with casein and textile-hydrazides 100-63-0D, derivs., reaction products with **antibodies** or antigens 302-01-2D, derivs., reaction products with **antibodies** or antigens 9004-34-6D, Cellulose, reaction products with hydrazides and antigens or **antibodies** 9004-35-7D, Cellulose acetate, reaction products with hydrazides and antigens or **antibodies** 9004-70-0D, Nitrocellulose, reaction products with hydrazides and antigens or **antibodies**
RL: ANST (Analytical study)
(as ELISA reagents)
IT 9003-53-6
RL: PROC (Process)
(conversion of, to **polyaminostyrene** in prepn. of ELISA reagents)
IT 9060-90-6P, **Polyaminostyrene**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, in prepn. of ELISA reagents)
IT 108-30-5, **Succinic** anhydride, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with amino group-contg. textiles, in prepn. of ELISA reagents)
IT **141-43-5D**, reaction products with nitrocellulose-acid hydrazide
RL: ANST (Analytical study)
(as ELISA reagent)
RN 141-43-5 HCAPLUS
CN Ethanol, 2-amino- (8CI, 9CI) (CA INDEX NAME)



L39 ANSWER 22 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1986:532042 HCAPLUS
DOCUMENT NUMBER: 105:132042
TITLE: Substance-conjugated complement component C1q
INVENTOR(S): Taguchi, Fumiaki; Mitsui, Isamu; Hara, Kinichi; Hayashi, Masaro; Ezawa, Kunio; Fukunaga, Kenichi; Kuranari, Jun
PATENT ASSIGNEE(S): Calpis Food Industry Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 66 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 177023	A2	19860409	EP 1985-112428	19851001
EP 177023	A3	19870812		
R: CH, DE, FR, GB, IT, LI, SE				
JP 61084560	A2	19860430	JP 1984-205686	19841002
JP 61102558	A2	19860521	JP 1984-223049	19841025
JP 61263928	A2	19861121	JP 1985-103898	19850517
JP 62024148	A2	19870202	JP 1985-162012	19850724
JP 62027663	A2	19870205	JP 1985-166004	19850729
DK 8504455	A	19860403	DK 1985-4455	19851001
CA 1268418	A1	19900501	CA 1985-491981	19851001
CA 1276103	A1	19901113	CA 1985-491980	19851001

PRIORITY APPLN. INFO.: JP 1984-205686 19841002
JP 1984-223049 19841025
JP 1985-103898 19850517
JP 1985-162012 19850724
JP 1985-166004 19850729

AB Complement C1q is labeled with a marker for use in immunoassays or therapy. The C1q is conjugated via a S atom at a site not involved in Ig binding. For example, purified rabbit C1q was reduced with dithiothreitol and coupled to a conjugate of peroxidase with 4-(maleimidomethyl)cyclohexane-1-carboxylic acid N-hydroxysuccinimide ester. The resulting conjugate was used for detn. of **antibody** to herpes simplex virus in serum samples in wells of a microtiter plate bearing immobilized viral antigen; after reaction of **antibody**, antigen, and complement, the wells were rinsed and H2O2 and a peroxidase substrate were added for spectrophotometric detn. of the bound complement in the wells.

IC ICM G01N033-532
ICS G01N033-543; G01N033-74; G01N033-569; G01N033-564; G01N033-577; G01N033-573; G01N033-574

CC 15-1 (Immunochemistry)
Section cross-reference(s): 9

ST complement conjugate **antibody** detn immunoassay

IT Bacteria
Interferons
RL: BIOL (Biological study)
(**antibodies** to, detn. of, by immunoassay, complement C1q conjugates in)

IT Mycoplasma pneumoniae
(**antibody** to, detn. of, by immunoassay, complement C1q conjugates in)

IT **Immunochemical analysis**
(complement C1q conjugates in)

IT **Antibodies**
Antigens
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, by immunoassay, complement C1q conjugates for)

IT Virus, animal
(herpes simplex, **antibody** to, detn. of, complement C1q conjugates in)

IT Fetoproteins
RL: BIOL (Biological study)
(.alpha.-, **antibody** to, detn. of, complement C1q conjugates

in)
IT 80295-33-6D, conjugates
RL: BIOL (Biological study)
(in immunoassays for **antibodies** and antigens)
IT 1309-38-2, biological studies
RL: BIOL (Biological study)
(**polystyrene** beads contg., complement C1q bound to, for immunoassays)
IT 9003-99-0DP, complement C1q conjugates 9031-11-2DP, complement C1q conjugates 15611-43-5DP, complement C1q conjugates 15611-43-5DP, reaction products with ethylenediamine and (maleimidomethyl)cyclohexanecarboxylic acid **succinimide** ester 27072-45-3DP, complement C1q conjugates
RL: PREP (Preparation)
(prepn. of, for immunoassays)
IT **107-15-3**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chlorophyllin a)
IT **107-15-3**, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chlorophyllin a)
RN 107-15-3 HCAPLUS
CN 1,2-Ethanediamine (9CI) (CA INDEX NAME)

$H_2N-CH_2-CH_2-NH_2$

L39 ANSWER 23 OF 23 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1986:514624 HCAPLUS
DOCUMENT NUMBER: 105:114624
TITLE: Bifunctional haptens and their use
INVENTOR(S): Grenner, Gerd; Kapmeyer, Wolfgang; Primes, Kathleen Jelich; Sigler, Gerald Francis
PATENT ASSIGNEE(S): Behringwerke A.-G., Fed. Rep. Ger.; American Hoechst Corp.
SOURCE: Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 183901	A2	19860611	EP 1985-105814	19850511
EP 183901	A3	19871202		
EP 183901	B1	19920708		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 78100	E	19920715	AT 1985-105814	19850511
JP 61130263	A2	19860618	JP 1985-110612	19850524
JP 06051670	B4	19940706		
AU 8547590	A1	19860605	AU 1985-47590	19850918
AU 600432	B2	19900816		
CA 1272193	A1	19900731	CA 1985-494628	19851105
US 4760142	A	19880726	US 1987-69747	19870706
US 5336621	A	19940809	US 1988-211940	19880627
PRIORITY APPLN. INFO.:			US 1984-675374	19841127

EP 1985-105814 19850511
US 1986-825425 19860203
US 1987-69747 19870706

OTHER SOURCE(S): CASREACT 105:114624

AB Bifunctional water-sol. hapten derivs. ABmY(CH2)nZ(CH2)nYBmA [A = hapten; B = (CH2)p, CO(CH2)q; Y = CONH, NHCO, O2C, CO2, O, S, NR; R = H, aliph. group; Z = org. residue with .gtoreq.1 hydrophilic atom(s); m = 0, 1; n = 1-10; p = 1-4; q = 2-4] are prepd. for affinity purifn. of polyclonal antibodies or nephelometric detn. of haptens (e.g. drugs) by **agglutination** inhibition. For example, diaminodimethyluracil hydrate reacted with glutaric anhydride in refluxing PhNMe2 to yield theophylline-8-butyric acid, which was amidated with 4,9-dioxa-1,12-dodecanediamine to produce a divalent hapten. A soln. of this product 10 mg in 0.5 mL DMSO, dild. with 2 mL 50 mM Na phosphate buffer, formed a clear, stable aq. soln.

IC ICM G01N033-531
ICS G01N033-78; G01N033-546

CC 23-21 (Aliphatic Compounds)
Section cross-reference(s): 1, 9, 28

IT **Immunochemical analysis**
(**agglutination test**, bifunctional haptens for)

IT **124-09-4**, reactions **7300-34-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(amidation by, of theophyllinebutyric acid)

IT 50-06-6, analysis 58-55-9, analysis
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, by **agglutination** immunoassay, bifunctional hapten for)

IT 104079-25-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and **succinimidation** of)

IT 104079-24-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and **succinylation** of)

IT **124-09-4**, reactions **7300-34-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(amidation by, of theophyllinebutyric acid)

RN 124-09-4 HCAPLUS
CN 1,6-Hexanediamine (7CI, 8CI, 9CI) (CA INDEX NAME)

$H_2N-(CH_2)_6-NH_2$

RN 7300-34-7 HCAPLUS
CN 1-Propanamine, 3,3'-[1,4-butanediylbis(oxy)]bis- (9CI) (CA INDEX NAME)

$H_2N-(CH_2)_3-O-(CH_2)_4-O-(CH_2)_3-NH_2$

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FILE 'EMBASE' ENTERED AT 11:10:45 ON 13 APR 2004
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PROCESSING COMPLETED FOR L46
PROCESSING COMPLETED FOR L48
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                  ANSWERS '12-22' FROM FILE EMBASE

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H2N~Ak~G1~G2        O=C~O~Et        O~Ak
  8   1  2  3        4  @5  6  7       @9 @10


REP G1=(1-10) 9-1 10-3
VAR G2=NH2/OH/5
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CONNECT IS E2  RC AT  10
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DEFAULT ECLEVEL IS LIMITED

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L15           174 SEA FILE=REGISTRY SUB=L13 SSS FUL L7
L17               STR

H2N~Ak~G2        O=C~O~Et
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VAR G2=NH2/OH/5
NODE ATTRIBUTES:
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DEFAULT ECLEVEL IS LIMITED

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                  4/ELC.SUB)) AND NC=1 NOT (PMS/CI OR IDS/CI OR RSD/FA)
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L40          6955 SEA FILE=MEDLINE ABB=ON  PLU=ON  L15 OR L21 OR GLYCINE ETHYL
                  ESTER OR 2-AMINOETHOXY ETHANOL OR AEO RO EBE OR TTD
L41        258892 SEA FILE=MEDLINE ABB=ON  PLU=ON  IMMUNOASSAY+NT/CT
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Considered
04/15/04
MEC

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L42          146 SEA FILE=MEDLINE ABB=ON  PLU=ON  L40 AND L41
L43            3 SEA FILE=MEDLINE ABB=ON  PLU=ON  L42 AND AGGLUT?
L45            8 SEA FILE=MEDLINE ABB=ON  PLU=ON  L40 AND SUCCIN? AND (AGGLUT?
                 OR L41 OR IMMUNO?)
L46           11 SEA FILE=MEDLINE ABB=ON  PLU=ON  L43 OR L45
L47        10341 SEA FILE=EMBASE ABB=ON  PLU=ON  L15 OR L21 OR GLYCINE ETHYL
                 ESTER OR 2-AMINOETHOXY ETHANOL OR AEO RO EBE OR TTD
L48           14 SEA FILE=EMBASE ABB=ON  PLU=ON  L47 AND SUCCIN? AND (AGGLUT?
                 OR L41 OR IMMUNO?)
L49           22 DUP REM L46 L48 (3 DUPLICATES REMOVED)
```

=> d l49 bib abs 1-22

L49 ANSWER 1 OF 22 MEDLINE on STN DUPLICATE 1
AN 1999359251 MEDLINE
DN PubMed ID: 10428913
TI Inhibition of polyamine synthesis arrests trichomonad growth and induces destruction of hydrogenosomes.
AU Reis I A; Martinez M P; Yarlett N; Johnson P J; Silva-Filho F C; Vannier-Santos M A
CS Laboratorio de Biologia da Superficie Celular, Instituto de Biofisica Carlos Chagas Filho, Universidade Federal do Rio de Janeiro, Brazil.
NC AI-25361 (NIAID)
AI-27857 (NIAID)
SO Antimicrobial agents and chemotherapy, (1999 Aug) 43 (8) 1919-23.
Journal code: 0315061. ISSN: 0066-4804.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199909
ED Entered STN: 19990925
Last Updated on STN: 19990925
Entered Medline: 19990909
AB Trichomonad parasites such as Tritrichomonas foetus produce large amounts of putrescine (1,4-diaminobutane), which is transported out of the cell via an antiport mechanism which results in the uptake of a molecule of spermine. The importance of putrescine to the survival of the parasite and its role in the biology of T. foetus was investigated by use of the putrescine analogue 1, 4-diamino-2-butanone (DAB). Growth of T. foetus in vitro was significantly inhibited by 20 mM DAB, which was reversed by the addition of exogenous 40 mM putrescine. High-performance liquid chromatography analysis of 20 mM DAB-treated T. foetus revealed that putrescine, spermidine, and spermine levels were reduced by 89, 52, and 43%, respectively, compared to those in control cells. The DAB treatment induced several ultrastructural alterations, which were primarily observed in the redox organelles termed hydrogenosomes. These organelles were progressively degraded, giving rise to large vesicles that displayed material **immunoreactive** with an antibody to beta-**succinyl**-coenzyme A synthetase, a hydrogenosomal enzyme. A protective role for polyamines as stabilizing agents in the trichomonad hydrogenosomal membrane is proposed.

L49 ANSWER 2 OF 22 MEDLINE on STN DUPLICATE 2
AN 1999102196 MEDLINE
DN PubMed ID: 9882647
TI Molecular characterization of eutF mutants of Salmonella typhimurium LT2 identifies eutF lesions as partial-loss-of-function tonB alleles.

AU Thomas M G; O'Toole G A; Escalante-Semerena J C
CS Department of Bacteriology, University of Wisconsin-Madison, Madison, Wisconsin 53706-1567, USA.
NC RO1-GM40313 (NIGMS)
SO Journal of bacteriology, (1999 Jan) 181 (2) 368-74.
Journal code: 2985120R. ISSN: 0021-9193.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199902
ED Entered STN: 19990301
Last Updated on STN: 19990301
Entered Medline: 19990218
AB The eutF locus of Salmonella typhimurium LT2 was identified as a locus necessary for the utilization of ethanolamine as a sole carbon source. Initial models suggested that EutF was involved in either ethanolamine transport or was a transcriptional regulator of an ethanolamine transporter. Phenotypic characterization of eutF mutants suggested EutF was somehow involved in 1,2-propanediol, propionate, and **succinate** utilization. Here we provide evidence that two alleles defining the eutF locus, Delta903 and eutF1115, are partial-loss-of-function tonB alleles. Both mutations were complemented by plasmids containing a wild-type allele of the Escherichia coli tonB gene. **Immunoblot** analysis using TonB monoclonal antibodies detected a TonB fusion protein in strains carrying eutF alleles. Molecular analysis of the Delta903 allele identified a deletion that resulted in the fusion of the 3' end of tonB with the 3' end of trpA. In-frame translation of the tonB-trpA fusion resulted in the final 9 amino acids of TonB being replaced by a 45-amino-acid addition. We isolated a derivative of a strain carrying allele Delta903 that regained the ability to grow on ethanolamine as a carbon and energy source. The molecular characterization of the mutation that corrected the Eut- phenotype caused by allele Delta903 showed that the new mutation was a deletion of two nucleotides at the tonB-trpA fusion site. This deletion resulted in a frameshift that replaced the 45-amino-acid addition with a 5-amino-acid addition. This change resulted in a TonB protein with sufficient activity to restore growth on ethanolamine and eut operon expression to nearly wild-type levels. It was concluded that the observed EutF phenotypes were due to the partial loss of TonB function, which is proposed to result in reduced cobalamin and ferric siderophore transport in an aerobic environment; thus, the eutF locus does not exist.

L49 ANSWER 3 OF 22 MEDLINE on STN DUPLICATE 3
AN 91152085 MEDLINE
DN PubMed ID: 1998718
TI Chemical modification and NMR studies on a mushroom lectin Ischnoderma resinosum **agglutinin** (IRA).
AU Kawagishi H; Mori H
CS Department of Applied Biological Chemistry, Faculty of Agriculture, Shizuoka University, Japan.
SO Biochimica et biophysica acta, (1991 Jan 29) 1076 (2) 179-86.
Journal code: 0217513. ISSN: 0006-3002.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199104
ED Entered STN: 19910428

Last Updated on STN: 19990129
Entered Medline: 19910409

AB Chemical modification and NMR studies on a beta-galactosyl-specific lectin which was isolated from the fruiting bodies of a mushroom, Ischnoderma resinosum, has been carried out in order to investigate the amino acid residues involved in its sugar-binding sites. Modification of amino groups with **succinic** anhydride greatly affected the hemagglutinating activity. Inhibitory sugar lactulose could prevent the loss of the activity. Modification of carboxyl groups with **glycine ethyl ester** led to a 75% loss of the activity, the presence of inhibitory sugar being protective against the modification. Treatment with cyclohexane-1,2-dione for modification of arginine residues was accompanied by a complete loss of the activity. The arginine residues modification could also be protected by the inhibitory sugar. N-Bromosuccinimide treatment for modification of tryptophan residues caused a loss of the activity, although the inhibitory sugar exhibited no protective effect against this treatment. Modification of thiol groups with 5,5'-dithiobis(2-nitrobenzoic acid) resulted in a 50% loss of the activity. Modification of histidine residues with ethoxyformic anhydride led to a complete loss of the activity. The loss of the activity could be protected by the inhibitory sugar. Treatment with N-acetylimidazole for modification of tyrosine residues was accompanied by a loss of the activity. This modification was completely prevented in the presence of the inhibitory sugar. The activity of the tyrosine-modified lectin was recovered by the treatment with hydroxylamine. Furthermore, in the NOESY spectrum of the mixture of IRA and its inhibitory sugar, methyl beta-galactoside, an NOE cross peak between H-3 and/or 5 of the p-hydroxyphenyl group of a tyrosine in the lectin, and H-5 of the galactoside could be observed. These results indicate that a tyrosine residue is involved in the carbohydrate-binding site of the lectin. In addition, line broadening and down-field shifts of the galactoside-protons were observed in the presence of the lectin.

L49 ANSWER 4 OF 22 MEDLINE on STN
AN 1999177079 MEDLINE
DN PubMed ID: 10077474
TI Comb-type prepolymers consisting of a polyacrylamide backbone and poly(L-lysine) graft chains for multivalent ligands.
AU Asayama S; Maruyama A; Akaike T
CS Department of Biomolecular Engineering, Tokyo Institute of Technology, 4259 Nagatsuta, Midori, Yokohama 226-8501, Japan.
SO Bioconjugate chemistry, (1999 Mar-Apr) 10 (2) 246-53.
Journal code: 9010319. ISSN: 1043-1802.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199904
ED Entered STN: 19990511
Last Updated on STN: 19990511
Entered Medline: 19990429

AB The comb-type copolymers consisting of a polyacrylamide (PAAm) backbone and poly(L-lysine) (PLL) graft chains have been prepared as the "prepolymer" for designing multivalent ligands. To regulate the length and density of the clusters of primary amino groups, the Nalpha-carboxyanhydride of Nepsilon-carbobenzoxy (CBZ)-L-lysine was first polymerized using p-vinylbenzylamine as an initiator. The resulting poly(CBZ-L-lysine) macromonomer was then radically copolymerized with AAm, followed by the deprotection of amino groups. For the model study, the

reactive clusters of primary amino groups were completely converted into anion clusters by the reaction with **succinic** anhydride. The model multivalent ligands having the biotin label on the PAAm backbone were prepared by the terpolymerization of the macromonomer, AAm, and the biotin derivative having a vinyl group. The enzyme-linked **immunosorbent** assay showed that the biotin with no spacer on the PAAm backbone was recognized by the avidin-peroxidase conjugate specifically. Therefore, the highly sensitive detection of the interaction between cells and various model multivalent ligands was possible. The selective labeling onto the PAAm backbone revealed that the converted anion clusters of graft chains interacted exclusively with the cell and that the backbone was inert to the interaction with the cell. These results indicate that the various PAAm-graft-PLL comb-type copolymers with the defined length and density of the PLL-grafts are the potential prepolymers to investigate and to optimize the affinity of the multivalent ligands for receptors.

L49 ANSWER 5 OF 22 MEDLINE on STN
AN 97125965 MEDLINE
DN PubMed ID: 8969187
TI Cross-linking of the NH2-terminal region of fibronectin to molecules of large apparent molecular mass. Characterization of fibronectin assembly sites induced by the treatment of fibroblasts with lysophosphatidic acid.
AU Zhang Q; Mosher D F
CS Departments of Medicine and Biomolecular Chemistry, University of Wisconsin, Madison, Wisconsin 53706, USA.
NC HL-21644 (NHLBI)
SO Journal of biological chemistry, (1996 Dec 27) 271 (52) 33284-92. Journal code: 2985121R. ISSN: 0021-9258.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199701
ED Entered STN: 19970219
Last Updated on STN: 20000303
Entered Medline: 19970128
AB Cell surface molecules on adherent cells that bind 125I-labeled fibronectin or its 70-kDa N-terminal fragment were identified by cross-linking with factor XIIIa and by photoaffinity labeling. Such cross-linking caused the 70-kDa fragment to become associated irreversibly to cell layers and was greater in cells treated with lysophosphatidic acid, an enhancer of fibronectin assembly and strong modulator of cell shape. Cross-linking of the 70-kDa fragment with factor XIIIa was to molecules that migrated in discontinuous sodium dodecyl sulfate-polyacrylamide gels at the top of the 3.3% stacking gel and near the top of the separating gel. Estimated sizes of these large apparent molecular mass molecules (LAMMs) were >>3 MDa and approximately 3 MDa. The label in 70-kDa fragment conjugated with 125I-sulfosuccinimidyl 2-(p-azidosalicylamido)-1, 3'-dithiopropionate was associated with >>3-MDa LAMMs without reduction and with approximately 3-MDa LAMMs after reduction and transfer of the cleavable label. The LAMMs were expressed on monolayer cells shortly after adherence, required both 1% Triton X-100 and 2 M urea for efficient extraction, and were susceptible to digestion with trypsin but not to cathepsin D digestion. Complexes of 125I-70-kDa fragment and LAMMs were also susceptible to limited acid digestion and Glu-C protease digestion but were not cleaved by chondroitin lyase or heparitinase. Neither the uncleaved complexes nor the cleavage products were **immunoprecipitated** with anti-fibronectin antibodies

directed toward epitopes outside the 70-kDa region. Thus, cell surface molecules that are either very large or not dissociated in sodium dodecyl sulfate comprise the labile matrix assembly sites for fibronectin.

L49 ANSWER 6 OF 22 MEDLINE on STN
AN 97083630 MEDLINE
DN PubMed ID: 8929279
TI Study of supramolecular structures released from the cell wall of Candida albicans by ethylenediamine treatment.
AU Mormeneo S; Rico H; Iranzo M; Aguado C; Sentandreu R
CS Seccion de Microbiologia, Facultat de Farmacia, Universitat de Valencia, Avenida Vicente Andres Estelles s/n, E-46100-Burjassot, Valencia, Spain.
SO Archives of microbiology, (1996 Nov) 166 (5) 327-35.
Journal code: 0410427. ISSN: 0302-8933.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199702
ED Entered STN: 19970219
Last Updated on STN: 19970219
Entered Medline: 19970203
AB Candida albicans cell wall components were analyzed by ethylenediamine (EDA) treatment. Based on their different solubility properties, the cell wall components produced three fractions (A, B, and C). Fractions B (EDA-soluble, water-insoluble) and C (EDA-insoluble) contained glucan, chitin, and protein in different proportions. After zymolyase (mainly a beta-glucanase complex) or chitinase treatment of fractions B and C, more polysaccharides and proteins were solubilized by a second EDA treatment, suggesting that the solubility of the polymers in EDA depends on the degree of polymer interactions. Western blot analysis using two monoclonal antibodies (1B12 and 4C12) revealed electrophoretic patterns that were similar in mycelial and yeast morphologies, except that in material obtained from mycelial walls, an additional band was detected with MAb 1B12. Fluorescence microscopy of cell wall fractions treated with FITC-labeled Con-A, Calcofluor white, and FITC-labeled **agglutinin** showed that glucan and mannoproteins are uniformly distributed in fractions B and C, while chitin is restricted to distinct patches. Transmission electron microscopy demonstrated that fraction C maintained the original shape of the cells, with an irregular thickness generally wider than the walls. When fraction C was treated with chitinase, the morphology was still present and was maintained by an external glucan layer, with an internal expanded fibrillar material covering the entire cellular lumen. Degradation of the glucan skeleton of fraction C with zymolyase resulted in the loss of the morphology.

L49 ANSWER 7 OF 22 MEDLINE on STN
AN 95198572 MEDLINE
DN PubMed ID: 7891582
TI Tailor-made glycopolymer syntheses.
AU Tropper F D; Romanowska A; Roy R
CS Department of Chemistry, University of Ottawa, Ottawa, Ontario, Canada.
SO Methods in enzymology, (1994) 242 257-71.
Journal code: 0212271. ISSN: 0076-6879.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199504

ED Entered STN: 19950427
Last Updated on STN: 19990129
Entered Medline: 19950417

L49 ANSWER 8 OF 22 MEDLINE on STN
AN 93300860 MEDLINE
DN PubMed ID: 8314811
TI Interactions of complement fraction C1q, fibronectin, and immunoglobulin G with polyacrylic microparticles used as solid-phase in immunoassay.
AU Cliquet F; Cuilliere M L; Montagne P; Duheille J
CS Immunology Laboratory, Faculty of Medicine, Vandoeuvre les Nancy, France.
SO Journal of biomedical materials research, (1993 May) 27 (5) 587-97.
Journal code: 0112726. ISSN: 0021-9304.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199307
ED Entered STN: 19930813
Last Updated on STN: 19980206
Entered Medline: 19930723
AB A microparticle-enhanced nephelometric immunoassay was recently described, where polyacrylic, hydrophilic, and polyfunctional microparticles are used as the solid phase. It is a one-step immunoassay based on the nephelometric quantification of microparticle **agglutination**. In such assays, the measurement of analytes at low concentration may be impaired by the need of using undiluted biological samples. This leads to work with high concentrations of several proteins liable to interfere with the **agglutination** process. In this paper, we report on a study performed with human serum and purified proteins, which were assayed by classical analytical methods. This work identified three major components of human serum specifically involved in yielding polyacrylic microparticle instability: complement fraction C1q, fibronectin, and immunoglobulins G. In this order of importance, they all showed a marked ability to be adsorbed on the microparticle's surface. Pretreatment of human serum with microparticles decreased the concentrations in C1q (82%), fibronectin (16%), and immunoglobulin G (4%) very unequally. However, it allowed the elimination of microparticle instability, consequently providing the possible use of such polyacrylic microparticles in a one-step nephelometric immunoassay of analytes at low concentration in biological samples, without washes or phase separation.

L49 ANSWER 9 OF 22 MEDLINE on STN
AN 92074608 MEDLINE
DN PubMed ID: 1741501
TI Anaphylaxis during anesthesia: use of radioimmunoassays to determine etiology and drugs responsible in fatal cases.
AU Fisher M M; Baldo B A; Silbert B S
CS University of Sydney and Head, Intensive Therapy Unit, Royal North Shore Hospital of Sydney, St Leonards, N.S.W., Australia.
SO Anesthesiology, (1991 Dec) 75 (6) 1112-5.
Journal code: 1300217. ISSN: 0003-3022.
CY United States
DT (CASE REPORTS)
Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199201
ED Entered STN: 19920124

Last Updated on STN: 19980206
Entered Medline: 19920106

L49 ANSWER 10 OF 22 MEDLINE on STN
AN 88183216 MEDLINE
DN PubMed ID: 3128265
TI Chemical modification studies on a lectin from Saccharomyces cerevisiae (baker's yeast).
AU Kundu M; Basu J; Ghosh A; Chakrabarti P
CS Department of Chemistry, Bose Institute, Calcutta, India.
SO Biochemical journal, (1987 Jun 15) 244 (3) 579-84.
Journal code: 2984726R. ISSN: 0264-6021.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198805
ED Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880512
AB The effect of chemical modification on a galactose-specific lectin isolated from a fatty acid auxotroph of Saccharomyces cerevisiae was investigated in order to identify the type of amino acids involved in its **agglutinating** activity. Modification of 50 free amino groups with **succinic** anhydride or citraconic anhydride led to an almost complete loss of activity. This could not be protected by the inhibitory sugar methyl alpha-D-galactopyranoside. Treatment with N-bromosuccinimide and N-acetylimidazole, for the modification of tryptophan and tyrosine residues, did not affect lectin activity. Modification of carboxy groups with **glycine ethyl ester** greatly affected lectin activity, although sugars afford partial protection. Modification of four thiol groups with N-ethylmaleimide was accompanied by a loss of 85% of the **agglutinating** activity, and two thiol groups were found to be present at the sugar-binding site of the lectin. Modification of 18 arginine residues with cyclohexane-1,2-dione and 26 histidine residues with ethoxyformic anhydride led to a loss of lectin activity. However, in these cases, modification was not protected by the abovementioned inhibitory sugar, suggesting the absence of these groups at the sugar-binding site. In all the cases, **immunodiffusion** studies with modified lectin showed no gross structural changes which could disrupt antigenic sites of the lectin.

L49 ANSWER 11 OF 22 MEDLINE on STN
AN 75010985 MEDLINE
DN PubMed ID: 4370095
TI In vivo subunit hybridization of **succinic** semialdehyde and 4-aminobutanal dehydrogenases from a Pseudomonas species.
AU Rosemblatt M S; Callewaert D M; Tchen T T
SO Biochemistry, (1974 Sep 24) 13 (20) 4176-80.
Journal code: 0370623. ISSN: 0006-2960.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197412
ED Entered STN: 19900310
Last Updated on STN: 19900310
Entered Medline: 19741219

L49 ANSWER 12 OF 22 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2002279129 EMBASE
TI Novel dendrimer based polyurethanes for PEO incorporation.
AU Duan X.; Griffith C.M.; Dube M.A.; Sheardown H.
CS H. Sheardown, Department of Chemical Engineering, McMaster University, 1280 Main St. W., Hamilton, Ont. L8S 4L7, Canada
SO Journal of Biomaterials Science, Polymer Edition, (2002) 13/6 (667-689). Refs: 33
ISSN: 0920-5063 CODEN: JBSEEA
CY Netherlands
DT Journal; Article
FS 027 Biophysics, Bioengineering and Medical Instrumentation
029 Clinical Biochemistry
LA English
SL English
AB A series of segmented polyurethanes based on methylene diisocyanate/poly (tetramethylene oxide) and chain extended with either ethylene diamine or butane diol in combination with a generation 2 polypropylenimine octaamine dendrimer were synthesized. For polymer synthesis, the dendrimers were protected with either t-boc or Fmoc groups and were incorporated into the polyurethane microstructure to permit further functionalization with biologically active groups. Following deprotection, the dendrimers were reacted with **succinimidyl** propionate polyethylene oxide (SPA-PEO) to improve the protein resistance of the polymers and to examine the potential of this technique for polymer functionalization. Different synthesis techniques were examined to optimize the incorporation of the PEO into the polymer microstructure. Incorporation of the dendrimers and the PEO were confirmed by NMR and FTIR. Gel permeation chromatography was used to examine the molecular weights of the various polyurethanes. The dendrimer incorporated polymers had significantly lower molecular weights than the ED or BDO chain extended controls, likely due to lower reactivity of the dendrimers as a result of steric factors. Following PEO reaction, the molecular weights of the resultant polymers were consistent with the levels of PEO incorporation noted by comparison of peak intensities in the NMR spectra. Due to the highly hydrophilic nature of the PEO, some migration to the polymer surface was expected. Water contact angles and XPS, used to characterize the surfaces, suggest that there was some PEO enrichment at the surface of the polymers. Adsorption of radiolabeled fibrinogen to the polymer surfaces was decreased by a factor of approximately 40% in some of the PEO incorporated polymers. There were also differences in the patterns of plasma protein adsorption on the various surfaces as evaluated by SDS PAGE and **immunoblotting**. Therefore, the use of dendrimers in biomaterials for incorporation of a large number of functional groups seems to be promising.

L49 ANSWER 13 OF 22 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2001096673 EMBASE
TI Development of an electrochemical **immunosensor** for direct detection of interferon-.gamma. at the attomolar level.
AU Dijksma M.; Kamp B.; Hoogvliet J.C.; Van Bennekom W.P.
CS W.P. Van Bennekom, Department of Biomedical Analysis, Faculty of Pharmacy, Utrecht University, P.O. Box 80082, 3508 TB Utrecht, Netherlands. W.P.vanBennekom@pharm.uu.nl
SO Analytical Chemistry, (1 Mar 2001) 73/5 (901-907). Refs: 43
ISSN: 0003-2700 CODEN: ANCHAM
CY United States

DT Journal; Article
FS 027 Biophysics, Bioengineering and Medical Instrumentation
029 Clinical Biochemistry
LA English
SL English
AB An electrochemical **immunosensor** for direct detection of the 15.5-kDa protein interferon-.gamma. (IFN-.gamma.) at attomolar level has been developed. Self-assembled monolayers (SAMs) of cysteine or acetylcysteine are formed on electropolished polycrystalline Au electrodes. IFN-.gamma. adsorbs physically to each of these SAMs. With injections of 100 mM KCl, IFN-.gamma. can be removed in the flow without damaging the acetylcysteine SAM. However, the cysteine SAM is affected by these KCl injections. In an on-line procedure in the flow, a specific antibody (MD-2) against IFN-.gamma. is covalently attached following carbodiimide/**succinimide** activation of the SAM. The activation of the carboxylic groups, attachment of MD-2, and deactivation of the remaining **succinimide** groups with ethanolamine are monitored impedimetrically at a frequency of 113 Hz, a potential of +0.2 V versus SCE, and an ac modulation amplitude of 10 mV. Plots of the real (Z') and imaginary (Z") component of the impedance versus time provide the information to control these processes. In the thermostated setup (23.0.degree.C), samples of unlabeled IFN-.gamma. (in phosphate buffer pH 7.4) are injected and the binding with immobilized MD-2 is monitored with ac impedance or potential-step methods. While the chronoamperometric results are rather poor, the ac impedance approach provides unsurpassed detection limits, as low as 0.02 fg mL(-1) (.apprx.1 aM) IFN-.gamma.. From a calibration curve (i.e. Z" versus the amount injected), recorded by multiple 50-.mu.L injections of 2 pg mL(-1) of IFN-.gamma., a dynamic range of 0-12 pg mL(-1) could be derived. However, when nonspecific adsorption is taken into account, which has been found to be largely reduced through injections of 100 mM KCl, a much smaller dynamic range of 0-0.14 fg mL(-1) remains. The **immunosensor** can be regenerated by using a sequence of potential pulses in the flow by which the SAM with attached MD-2 and bound IFN-.gamma. is completely removed. When the developed procedures described above are repeated, the response of the **immunosensor** is reproducible within 10%.

L49 ANSWER 14 OF 22 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 2000135953 EMBASE
TI Vascular permeability in a human tumour xenograft: Molecular charge dependence.
AU Dellian M.; Yuan F.; Trubetskoy V.S.; Torchilin V.P.; Jain R.K.
CS R.K. Jain, Department of Radiation Oncology, Massachusetts General Hospital, Harvard Medical School, Boston, MA 02114, United States
SO British Journal of Cancer, (2000) 82/9 (1513-1518).
Refs: 50
ISSN: 0007-0920 CODEN: BJCAAI
CY United Kingdom
DT Journal; Article
FS 016 Cancer
029 Clinical Biochemistry
LA English
SL English
AB Molecular charge is one of the main determinants of transvascular transport. There are, however, no data available on the effect of molecular charge on microvascular permeability of macromolecules in solid tumours. To this end, we measured tumour microvascular permeability to different proteins having similar size but different charge. Measurements

were performed in the human colon adenocarcinoma LS174T transplanted in transparent dorsal skinfold chambers in severe combined **immunodeficient** (SCID) mice. Bovine serum albumin (BSA) and IgG were fluorescently labelled and were either cationized by conjugation with hexamethylenediamine or anionized by **succinylation**. The molecules were injected i.v. and the fluorescence in tumour tissue was quantified by intravital fluorescence microscopy. The fluorescence intensity and pharmacokinetic data were used to calculate the microvascular permeability. We found that tumour vascular permeability of cationized BSA (pI-range: 8.6-9.1) and IgG (pI: 8.6-9.3) was more than two-fold higher (4.25 and 4.65 x 10-7 cm s-1) than that of the anionized BSA (pI approximate 2.0) and IgG (pI: 3.0-3.9; 1.11 and 1.93 x 10-7 cm s-1, respectively). Our results indicate that positively charged molecules extravasate faster in solid tumours compared to the similar-sized compounds with neutral or negative charges. However, the plasma clearance of cationic molecules was .apprx.2 x faster than that of anionic ones, indicating that the modification of proteins enhances drug delivery to normal organs as well. Therefore, caution should be exercised when such a strategy is used to improve drug and gene delivery to solid tumours. (C) 2000 Cancer Research Campaign.

L49 ANSWER 15 OF 22 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

AN 1998109558 EMBASE

TI Tissue transglutaminase is not increased during apoptosis of HT-1080 human fibrosarcoma cells.

AU Lim S.D.; Kim I.G.; Park S.C.; Chung S.I.; Nomizu M.; Kleinman H.K.; Kim W.H.

CS Dr. I.G. Kim, Department of Pathology, Seoul National University, College of Medicine, 29 Yongon-dong, Chongno-gu, Seoul 110-79, Korea, Republic of. woohokim@plaza.snu.ac.kr

SO Experimental and Toxicologic Pathology, (1998) 50/1 (79-82).
Refs: 17
ISSN: 0940-2993 CODEN: ETPAEK

CY Germany

DT Journal; Article

FS 005 General Pathology and Pathological Anatomy
016 Cancer
029 Clinical Biochemistry
030 Pharmacology
037 Drug Literature Index

LA English

SL English

AB Tissue transglutaminase (tTGase), a cytosolic enzyme which catalyze the covalent cross-linking of proteins is thought to be involved in the apoptosis. Here, we tested whether tTGase is involved during HT-1080 fibrosarcoma cell apoptosis induced by the YIGSR (Tyr-Ile-Gly-Ser-Arg) peptide. This sequence is derived from the laminin .alpha.1 chain, and its potency is increased by the formation of a 16mer polymerization using a lysine tree structure. Cells were treated with several different concentrations of Ac-Y16 for 16 hours, and apoptosis was increased in dose-dependent manner. When assayed by incorporation of [14C] putrescine into **succinylated** casein, total transglutaminase activity was decreased in parallel with the change in the number of attached cells. Western blot analysis using polyclonal antibody against tTGase showed that the tTGase protein level had not been significantly changed when equal amounts of the protein were applied. To confirm this result, we induced apoptosis of these cells by coating the tissue culture plates with non-adhesive poly-hydroxyethyl methacrylate (HEMA). Western blot analysis

showed that the tTGase protein level did not change during this process of apoptosis. Although it has been suggested that tTGase is involved in the process of apoptosis of various cells in vitro and in vivo, our data demonstrate that tTGase is not involved in the process of apoptosis of HT-1080 human fibrosarcoma cell induced by either Ac-Y16 or a non-adhesive culture surface.

L49 ANSWER 16 OF 22 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 97257056 EMBASE
DN 1997257056
TI Regulation of the inducible acetamidase gene of Mycobacterium smegmatis.
AU Parish T.; Mahenthiralingam E.; Draper P.; Davis E.O.; Colston M.J.
CS P. Draper, Lab. Leprosy Mycobacterial Research, National Institute Medical Research, The Ridgeway, London NW7 1AA, United Kingdom.
p-draper@nimr.mrc.ac.uk
SO Microbiology, (1997) 143/7 (2267-2276).
Refs: 34
ISSN: 1350-0872 CODEN: MROBEO
CY United Kingdom
DT Journal; Article
FS 004 Microbiology
LA English
SL English
AB The inducible acetamidase of Mycobacterium smegmatis NCTC 8159 is expressed at high levels in the presence of a suitable inducer, such as acetamide. The gene and 1.cntdot.5 kb of upstream sequence had previously been sequenced. A further 1.cntdot.4 kb of upstream sequence has now been determined, containing an additional ORF on the opposite strand to the acetamidase gene. This ORF has significant homologies to genes encoding regulatory proteins involved in amidase expression in other organisms. Restriction fragments from the 4 kb region were subcloned into a promoter-probe shuttle vector to locate the approximate region of the acetamidase promoter and investigate the mechanism of regulation. An inducible promoter was found to lie in the 1.cntdot.4 kb region situated 1.cntdot.5 kb upstream from the acetamidase coding region. Expression of the acetamidase was studied at the protein and mRNA levels. Using **immunoblotting**, induction of the enzyme was demonstrated in minimal medium containing **succinate** plus acetamide, but not in a richer medium (Lemco broth) plus acetamide, confirming that regulation of acetamidase expression is mediated by both positive and negative control elements. After induction by acetamide, an increase above basal level could be detected after 1 h for both protein levels (using ELISA) and mRNA levels (using Northern blot analysis), indicating that control of expression is at the mRNA level. The size of the mRNA transcript detected was approximately 1.cntdot.2 kb, the size of the acetamidase coding region. Since no promoter was identified immediately upstream of the coding region, this raises the possibility that a larger, primary transcript (possibly polycistronic) is cleaved to produce a stable form encoding the acetamidase protein.

L49 ANSWER 17 OF 22 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 93141745 EMBASE
DN 1993141745
TI Post-sclerotherapy esophageal perforations in liver transplant patients.
AU Merhav H.; Bron K.; Pinna A.; Mieles L.; Ramos H.; Linden P.; Fung J.J.
CS Oklahoma Transplantation Institute, Abdominal Transplantation Division, Baptist Medical Center of Oklahoma, 3300 NW Expressway,Oklahoma City, OK,

73112, United States
SO Clinical Transplantation, (1993) 7/2 (211-215).
ISSN: 0902-0063 CODEN: CLTRED
CY Denmark
DT Journal; Article
FS 009 Surgery
037 Drug Literature Index
048 Gastroenterology
LA English
SL English
AB Esophageal perforations in liver transplant patients are associated with high morbidity and mortality (1). We describe 2 cases of esophageal perforations following sclerotherapy for variceal bleeding. Diagnosis was made 20 and 6 days post-sclerotherapy and 16 and 4 days post-liver transplant. Both cases were treated with pharyngeal drainage or diversion, pleural drainage, gastrostomy, intravenous hyperalimentation, enteral feeding, antibiotics, withdrawal of steroids and reduction of **immunosuppressive** drugs. In both cases closure of the fistula occurred within 10 to 14 days after detection and with no sign of esophageal stricture formation. We believe this approach to esophageal perforations may be used safely in liver transplantation patients if close monitoring of potential complications is adhered to. This approach obviates the risks of thoracotomy without compromising the basic surgical principles of exclusion and drainage.

L49 ANSWER 18 OF 22 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 92258885 EMBASE
DN 1992258885
TI Growth of Porphyromonas gingivalis, Treponema denticola, T. pectinovorum, T. socranskii, and T. vincentii in a chemically defined medium.
AU Wyss C.
CS Oral Microbiol./Gen. Immunol. Dept., Dental Institute, University of Zurich, Plattenstrasse 11,CH-8028 Zurich, Switzerland
SO Journal of Clinical Microbiology, (1992) 30/9 (2225-2229).
ISSN: 0095-1137 CODEN: JCMIDW
CY United States
DT Journal; Article
FS 004 Microbiology
011 Otorhinolaryngology
LA English
SL English
AB A chemically defined medium, OMIZ (Oral Microbiology and **Immunology**, Zurich)-W1 was developed. Medium OMIZ-W1 supports the long-term proliferation of a wide range of oral anaerobes, including representative strains of four Treponema species and Porphyromonas gingivalis. High concentrations of ascorbic acid and ammonium ions proved to be important for the growth of these organisms. T. denticola CD-1 grew in the absence of polyamines and long-chain fatty acids, T. pectinovorum and T. socranskii required polyamines, whereas T. vincentii depended on both polyamines and lecithin for growth. Specific requirements for purines and/or pyrimidines were detected, and these requirements could be used to distinguish Haemophilus- Actinobacillus group organisms. Some strains of P. gingivalis grew without vitamin K, while others were not satisfied by menadione but required its precursor 1,4-dihydroxy-2-naphthoic acid. Protoporphyrin IX or hemin equally satisfied the porphyrin requirements of P. gingivalis and Bacteroides forsythus, whereas ferrous sulfate was more efficiently used as a source of iron than was hemin. The cellular cohesiveness of P. gingivalis increased with high concentrations of hemin

in the growth medium. Prevotella intermedia, B. forsythus, and several strains of P. gingivalis were more fastidious and required a protein or serum supplement to grow in medium OMIZ- W1.

L49 ANSWER 19 OF 22 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 87041081 EMBASE
DN 1987041081
TI Anti-endotoxin **immunotherapy** for canine parvovirus endotoxaemia.
AU Wessels B.C.; Gaffin S.L.
CS Department of Physiology, University of Natal Medical School, Congella 4013, South Africa
SO Journal of Small Animal Practice, (1986) 27/10 (609-615).
CODEN: JAPRAN
CY United Kingdom
DT Journal
FS 037 Drug Literature Index
LA English

L49 ANSWER 20 OF 22 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 87029974 EMBASE
DN 1987029974
TI Anaphylactic reactions: A therapeutic regimen for the general practitioner.
AU Fisher McD. M.
CS Intensive Therapy Unit, Royal North Shore Hospital, Sydney, NSW, Australia
SO Current Therapeutics, (1986) 27/6 (49-54).
CODEN: CUTHDB
CY Australia
DT Journal
FS 038 Adverse Reactions Titles
037 Drug Literature Index
LA English

L49 ANSWER 21 OF 22 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 85006319 EMBASE
DN 1985006319
TI Management of adverse drug reactions.
AU Sheffer A.L.; Pennoyer D.S.
CS Harvard Medical School, Boston, MA, United States
SO Journal of Allergy and Clinical Immunology, (1984) 74/4 II (580-588).
CODEN: JACIBY
CY United States
DT Journal
FS 038 Adverse Reactions Titles
037 Drug Literature Index
026 Immunology, Serology and Transplantation
030 Pharmacology
006 Internal Medicine
007 Pediatrics and Pediatric Surgery
013 Dermatology and Venereology
LA English
AB Successful management of adverse drug reactions requires early identification and prompt treatment of anaphylaxis, whether due to **immunoglobulin** (Ig) E- or non-IgE-mediated mechanisms of mast cell mediator release. Acute therapy is directed toward enhancement of oxygenation and maintenance of normotension. Requisite measures include

the use of epinephrine, oxygen, and adequate fluid replacement; in some instances, vasopressors or corticosteroid drug therapy may be warranted. Emergency measures may be needed to maintain the airway. although the offending drug is usually discontinued, a necessary drug for which there is no satisfactory alternative occasionally may be continued without danger of further anaphylaxis as long as therapy is not interrupted. Other nonemergent adverse drug reactions requiring an early decision include accelerated urticarial and late maculopapular eruptions, in both of which the patient may tolerate a necessary drug with schedule manipulation. differentiation of an adverse drug reaction from problems unrelated to the drug is essential so that needed medication is not inappopriately discontinued. Good management also requires anticipation of adverse reactions whenever a therapeutic program is instituted. Familiarity with the drug groups most commonly responsible for **immunologic** reactions is helpful, as is knowledge of satisfactory alternatives for these drugs in the presence of known hypersensitivity. An adverse reaction can often be minimized through use of established protocols for premedication. Desensitization, when essential, may be achieved for most drugs with graduated dosage schedules and maintained through continued administration of the drug. Identification to avoid inadvertent exposure to agents that have caused **immunologic** reactions in the past is essential.

L49 ANSWER 22 OF 22 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN
AN 76150798 EMBASE
DN 1976150798
TI An absolute requirement for serum macromolecules in phytohaemagglutinin induced human lymphocyte DNA synthesis.
AU Yachnin S.; Raymond J.
CS Franklin McLean Mem. Res. Inst., Univ. Chicago, Ill., United States
SO Clinical and Experimental Immunology, (1975) 22/1 (153-166).
CODEN: CEXIAL
DT Journal
FS 037 Drug Literature Index
026 Immunology, Serology and Transplantation
022 Human Genetics
005 General Pathology and Pathological Anatomy
LA English
AB The authors examined the effect of different variables such as tissue culture media, with or without various supplements, lymphocyte isolation techniques, lymphocyte contamination by autologous red blood cells and platelets, and lymphocyte numbers, on the requirement for serum during phytohemagglutinin (PHA) induced DNA synthesis in human lymphocytes. At all mitogen doses tested, it was found that dialysable constituents of serum enrich the ability of all tissue culture media to support lymphocyte DNA synthesis; however, human lymphocytes display an absolute requirement for nondialysable macromolecular constituents of serum in order to synthesize DNA.

Inventor Search

L5 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:376312 HCAPLUS
DOCUMENT NUMBER: 138:365138
TITLE: Particles for immunoassays and methods for treating the same
INVENTOR(S): **Lawrence, Christopher C.; Yuan, Wei ; Shanafelt, Armen B.**
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

Considered 04/14/04

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003092201	A1	20030515	US 2001-53058	20011102
US 2003087458	A1	20030508	US 2001-25196	20011218
EP 1319953	A1	20030618	EP 2002-24080	20021029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2003185667	A2	20030703	JP 2002-318893	20021031

PRIORITY APPLN. INFO.: US 2001-53058 A2 20011102
US 2001-25196 A 20011218 this application

OTHER SOURCE(S): MARPAT 138:365138

AB A method of treating particles to be used in immunoassays reduces interference in particle agglutination assays. For particles having covalently bound antibodies and residual NHS-ester or sNHS-ester groups on the surface, the reactive esters are treated with an aq. mixt. contg. an amine compd. of formula (I): H2N-R-X. The moiety -X is -NH2, -OH, or -CO2CH2CH3; and R is an alkyl group or an alkyl ether group. When -X is -NH2 or -CO2CH2CH3, R contains from 1 to 20 carbon atoms; and when -X is -OH, R contains from 4 to 20 carbon atoms.

IC ICM G01N033-544
ICS B05D003-00
NCL 436528000; 427002110
CC 9-10 (Biochemical Methods)
ST particle immunoassay treating
IT Latex
(Activated; particles for immunoassays and methods for treating the same)
IT Functional groups
(Alkyl ether; particles for immunoassays and methods for treating the same)
IT Functional groups
(Propionyl; particles for immunoassays and methods for treating the same)
IT Esters, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Reactive; particles for immunoassays and methods for treating the same)
IT Immunoassay
(agglutination test; particles for immunoassays and methods for treating the same)
IT Bond

(covalent; particles for immunoassays and methods for treating the same)
IT Carboxyl group
(ionized; particles for immunoassays and methods for treating the same)
IT Adsorption
Alkyl groups
Amino group
Blood serum
Ceramics
Chemical formula
Coupling agents
Hydroxyl group
Immunoassay
Interference
Mixtures
Particles
Surface
Test kits
pH
(particles for immunoassays and methods for treating the same)
IT Proteins
RL: ANT (Analyte); ANST (Analytical study)
(particles for immunoassays and methods for treating the same)
IT Amines, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(particles for immunoassays and methods for treating the same)
IT Antibodies
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(particles for immunoassays and methods for treating the same)
IT Polymers, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(particles for immunoassays and methods for treating the same)
IT Reagents
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(particles for immunoassays and methods for treating the same)
IT 123-56-8D, Succinimide, esters 151-51-9, Carbodiimide 459-73-4, Glycine ethyl ester 929-06-6 929-59-9, 2,2'-(Ethylenedioxy)bisethylamine 4246-51-9, 4,7,10-Trioxa-1,13-tridecanediamine 7440-44-0D, Carbon, compds. contg. 7440-57-5, Gold, uses 7782-44-7D, Oxygen, esters 82436-78-0, N-Hydroxysulfosuccinimide
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(particles for immunoassays and methods for treating the same)

L5 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:355758 HCAPLUS
DOCUMENT NUMBER: 138:350816
TITLE: Particles for immunoassays and methods for treating the same
INVENTOR(S): **Lawrence, Christopher C.; Yuan, Wei ; Shanafelt, Armen B.**
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S. Ser. No. 53,058.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003087458	A1	20030508	US 2001-25196	20011218
US 2003092201	A1	20030515	US 2001-53058	20011102
EP 1319953	A1	20030618	EP 2002-24080	20021029
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2003185667	A2	20030703	JP 2002-318893	20021031

PRIORITY APPLN. INFO.: US 2001-53058 A2 20011102
US 2001-25196 A 20011218

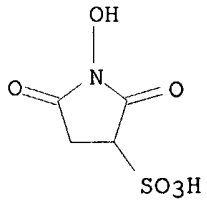
OTHER SOURCE(S): MARPAT 138:350816

AB A method of treating particles to be used in immunoassays reduces interference in particle agglutination assays. For particles having covalently bound antibodies and residual NHS-ester or sNHS-ester groups on the surface, the reactive esters are treated with an aq. mixt. contg. an amine compd. of formula (I): 2 The moiety -X is -NH2, -OH, or -CO2CH2CH3; and R is an alkyl group or an alkyl ether group. When -X is -NH2 or -CO2CH2CH3, R contains from 1 to 20 carbon atoms; and when -X is -OH, R contains from 4 to 20 carbon atoms.

IC ICM G01N033-543
ICS G01N033-545; B05D003-00
NCL 436523000; 427002110
CC 9-10 (Biochemical Methods)
ST particle immunoassay treating
IT Functional groups
(Alkyl ether; particles for immunoassays and methods for treating the same)
IT Esters, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(NHS-; particles for immunoassays and methods for treating the same)
IT Immunoassay
(agglutination test, Particle; particles for immunoassays and methods for treating the same)
IT Bond
(covalent; particles for immunoassays and methods for treating the same)
IT Carboxyl group
(ionized; particles for immunoassays and methods for treating the same)
IT Adsorption
Alkyl groups
Amino group
Blood serum
Ceramics
Chemical formula
Coupling agents
Hydroxyl group
Immunoassay
Interference
Latex
Mixtures
Particles
Surface
Test kits
pH
(particles for immunoassays and methods for treating the same)

IT Antigens
RL: ANT (Analyte); ANST (Analytical study)
(particles for immunoassays and methods for treating the same)
IT Antibodies
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(particles for immunoassays and methods for treating the same)
IT Reagents
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(particles for immunoassays and methods for treating the same)
IT Polymers, uses
RL: DEV (Device component use); USES (Uses)
(particles for immunoassays and methods for treating the same)
IT Amines, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(particles for immunoassays and methods for treating the same)
IT Carbodiimides
RL: RCT (Reactant); RACT (Reactant or reagent)
(particles for immunoassays and methods for treating the same)
IT Proteins
RL: RCT (Reactant); RACT (Reactant or reagent)
(particles for immunoassays and methods for treating the same)
IT Albumins, uses
RL: NUU (Other use, unclassified); USES (Uses)
(serum, bovine; particles for immunoassays and methods for treating the same)
IT 7440-57-5, Gold, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(particles for immunoassays and methods for treating the same)
IT 79-09-4D, Propanoic acid, amines contg. 102-71-6, Triethanolamine, reactions 123-56-8D, Succinimide, esters 459-73-4, Glycine ethyl ester 929-06-6 929-59-9, 2,2'-(Ethylenedioxy)bisethylamine 4246-51-9, 4,7,10-Trioxa-1,13-tridecanediamine 6066-82-6, N-Hydroxysuccinimide 7440-44-0D, Carbon, amines contg. 7782-44-7D, Oxygen, compd. contg. 82436-78-0, N-Hydroxysulfosuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(particles for immunoassays and methods for treating the same)

L6 ANSWER 1 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **82436-78-0** REGISTRY
CN 3-Pyrrolidinesulfonic acid, 1-hydroxy-2,5-dioxo- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN N-Hydroxysulfosuccinimide
CN Sulfo-N-hydroxysuccinimide
CN Sulfo-NHS
FS 3D CONCORD
DR 100839-39-2
MF C4 H5 N O6 S
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CSCHEM, MEDLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

162 REFERENCES IN FILE CA (1907 TO DATE)
22 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
162 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 2 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **7782-44-7** REGISTRY
CN Oxygen (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN Dioxygen
CN Molecular oxygen
CN Oxygen molecule
FS 3D CONCORD
DR 1338-93-8, 14797-70-7, 80217-98-7, 80937-33-3
MF O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

O=O

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

341172 REFERENCES IN FILE CA (1907 TO DATE)
26429 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
341559 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L6 ANSWER 3 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **7440-57-5** REGISTRY
CN Gold (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN A 4631
CN A 4953
CN AY 5022
CN Britecote
CN Burnish Gold
CN C.I. 77480
CN C.I. Pigment Metal 3
CN Colloidal gold
CN Furuuchi 8560
CN G 1402
CN Gold 197
CN Gold black
CN Gold element
CN Gold Flake
CN Gold Leaf
CN Gold Powder
CN Palegold 5550
CN Perfect Gold
CN PH 870
CN SG 10NK
CN Shell Gold
CN TR 1306
DR 33019-35-1
MF Au
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, ULIDAT, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Au

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

137625 REFERENCES IN FILE CA (1907 TO DATE)

4029 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
137801 REFERENCES IN FILE CAPLUS (1907 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 4 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **7440-44-0** REGISTRY
CN Carbon (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1262R97
CN 207A
CN 207A (carbon)
CN 207E3
CN 20SPD
CN 2C98
CN 3GX
CN 4GCX
CN 4GM
CN 606R97
CN AC 01
CN AC 01 (adsorbent)
CN AC 100
CN AC 100 (adsorbent)
CN AC 40
CN AC 40 (adsorbent)
CN Acticarbon 25K
CN Acticarbon ENO
CN Acticarbon TK
CN Actitex CS 1501
CN Activated carbon
CN AG 2
CN AG 2 (catalyst support)
CN AG 2-4
CN AG 3
CN AG 3 (adsorbent)
CN AG 5
CN AG 5 (adsorbent)
CN AG-M
CN AG-M (carbon)
CN AG-OV 1
CN AGN 1
CN AGN 1 (carbon)
CN AGN 2
CN AGN 2 (carbon)
CN AGN 3
CN AGS 3
CN AGS 4
CN AGS 4 (adsorbent)
CN AK
CN AK (adsorbent)
CN Amoco PX 21
CN Anthrasorb
CN AR 2
CN AR 2 (carbon)
CN AR 3
CN AR 3 (carbon)
CN AR-A
CN AR-A (carbon)

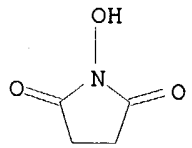
CN ARD
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY
DR 12789-22-9, 130960-03-1, 67167-41-3, 114680-00-1, 37196-29-5, 137322-21-5, 76416-61-0, 82600-58-6, 83138-28-7, 26837-67-2, 39422-04-3, 39434-34-9, 116788-82-0, 208519-32-8, 208728-20-5
MF C
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

C

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

274059 REFERENCES IN FILE CA (1907 TO DATE)
11131 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
274399 REFERENCES IN FILE CAPLUS (1907 TO DATE)
18 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 5 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **6066-82-6** REGISTRY
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Succinimide, N-hydroxy- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 1-Hydroxy-2,5-pyrrolidinedione
CN 1-Hydroxysuccinimide
CN Hydroxysuccinimide
CN N-Hydroxy-2,5-dioxopyrrolidine
CN N-Hydroxysuccinimide
CN NSC 74335
FS 3D CONCORD
MF C4 H5 N O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MSDS-OHS, PIRA, PROMT, PS, SPECINFO, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3542 REFERENCES IN FILE CA (1907 TO DATE)
224 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3552 REFERENCES IN FILE CAPLUS (1907 TO DATE)
5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 6 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **4246-51-9** REGISTRY
CN 1-Propanamine, 3,3'-[oxybis(2,1-ethanediyloxy)]bis- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Propylamine, 3,3'-[oxybis(ethyleneoxy)]bis- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 1,13-Diamino-4,7,10-trioxatridecane
CN 4,7,10-Trioxa-1,13-tridecanamine
CN 4,7,10-Trioxatridecane-1,13-diamine
CN Diethylene glycol bis(3-aminopropyl) ether
CN Q 19262
FS 3D CONCORD
MF C10 H24 N2 O3
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, HODOC*, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

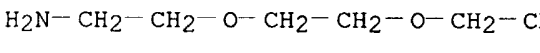
$H_2N-(CH_2)_3-O-CH_2-CH_2-O-CH_2-CH_2-O-(CH_2)_3-NH_2$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

239 REFERENCES IN FILE CA (1907 TO DATE)
29 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
240 REFERENCES IN FILE CAPLUS (1907 TO DATE)
5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 7 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **929-59-9** REGISTRY
CN Ethanamine, 2,2'-[1,2-ethanediylbis(oxy)]bis- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ethylamine, 2,2'-(ethylenedioxy)bis- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 1,2-Bis(2-aminoethoxy)ethane
CN 1,8-Diamino-3,6-dioxaoctane
CN 2,2'-(Ethylenedioxy)bis(ethylamine)

CN 2,2'-(Ethylenedioxy)diethylamine
CN 2,2'-[1,2-Ethanediylbis(oxy)]bis[ethanamine]
CN 3,6-Dioxa-1,8-octanediamine
CN DA 10
CN Daitocurar J 5030
CN EDR 148
CN Ethylene glycol bis(2-aminoethyl) ether
CN Jeffamine EDR 148
CN NSC 28972
CN XTJ 504
FS 3D CONCORD
MF C6 H16 N2 O2
CI COM
LC STN Files: BEILSTEIN*, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**, NDSL**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

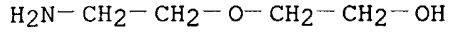


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

663 REFERENCES IN FILE CA (1907 TO DATE)
96 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
666 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 8 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **929-06-6** REGISTRY
CN Ethanol, 2-(2-aminoethoxy)- (7CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN .beta.-(.beta.-Hydroxyethoxy)ethylamine
CN .beta.-Hydroxy-.beta.'-aminodiethyl ether
CN 1-Amino-2-(2-hydroxyethoxy)ethane
CN 2-(2-Aminoethoxy)ethanol
CN 2-(2-Hydroxyethoxy)ethylamine
CN 2-(Hydroxyethoxy)ethylamine
CN 2-Amino-2'-hydroxydiethyl ether
CN 2-Aminoethyl 2-hydroxyethyl ether
CN 5-Amino-3-oxapentan-1-ol
CN 5-Hydroxy-3-oxapentylamine
CN Diethylene glycol amine
CN Diethylene glycol monoamine
CN Diglycolamine
CN NSC 86108
FS 3D CONCORD
MF C4 H11 N O2
CI COM
LC STN Files: ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS, PROMT, RTECS*, SPECINFO, SYNTHLINE,

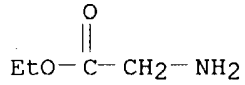
TOXCENTER, TULSA, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1094 REFERENCES IN FILE CA (1907 TO DATE)
118 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1095 REFERENCES IN FILE CAPLUS (1907 TO DATE)
7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 9 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **459-73-4** REGISTRY
CN Glycine, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN (Ethoxycarbonyl)methylamine
CN Aminoacetic acid ethyl ester
CN Ethyl 2-aminoacetate
CN Ethyl aminoacetate
CN Ethyl glycinate
CN Ethyl glycine
FS 3D CONCORD
MF C4 H9 N O2
CI COM
LC STN Files: ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CHEMINFORMRX, CHEMLIST, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, MEDLINE, PS, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)

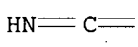


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1615 REFERENCES IN FILE CA (1907 TO DATE)
83 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1616 REFERENCES IN FILE CAPLUS (1907 TO DATE)
59 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 10 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **151-51-9** REGISTRY
CN Methanediimine (9CI) (CA INDEX NAME)

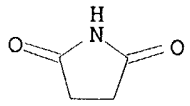
OTHER CA INDEX NAMES:
CN Carbodiimide (6CI, 7CI, 8CI)
OTHER NAMES:
CN Stabilisator 9000
FS 3D CONCORD
MF C H2 N2
CI COM
LC STN Files: AGRICOLA, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSNB, EMBASE, GMELIN*, IFICDB, IFIPAT, IFIUDB, PIRA, PROMT, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

722 REFERENCES IN FILE CA (1907 TO DATE)
196 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
726 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

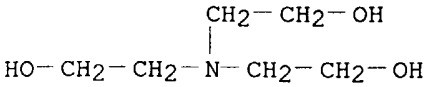
L6 ANSWER 11 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **123-56-8** REGISTRY
CN 2,5-Pyrrolidinedione (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Succinimide (8CI)
OTHER NAMES:
CN 2,5-Diketopyrrolidine
CN 2,5-Dioxopyrrolidine
CN Butanimide
CN L 113B
CN Lubrizol 6406
CN NSC 11204
CN NSC 13114
CN NSC 49152
CN Succinic acid imide
CN Succinic imide
FS 3D CONCORD
DR 127004-69-7, 89963-74-6
MF C4 H5 N O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DIPPR*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3183 REFERENCES IN FILE CA (1907 TO DATE)
1242 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3185 REFERENCES IN FILE CAPLUS (1907 TO DATE)
5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

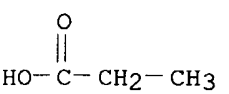
L6 ANSWER 12 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **102-71-6** REGISTRY
CN Ethanol, 2,2',2''-nitrilotris- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ethanol, 2,2',2''-nitrilotri- (8CI)
OTHER NAMES:
CN 2,2',2''-Nitrilotriethanol
CN 2,2',2''-Nitrilotris[ethanol]
CN Alkanolamine 244
CN Biafine
CN Daltogen
CN Nitrilotriethanol
CN NSC 36718
CN S 80
CN S 80 (amine)
CN Sterolamide
CN Sting-Kill
CN TEA
CN TEA (amino alcohol)
CN TEOA
CN Triethanolamin
CN Triethanolamine
CN Tris(.beta.-hydroxyethyl)amine
CN Tris(2-hydroxyethyl)amine
CN tris-(2-Hydroxyethyl)amine
CN Trolamine
FS 3D CONCORD
DR 126068-67-5, 105655-27-4, 36549-53-8, 36549-54-9, 36549-55-0, 36659-79-7, 464917-26-8
MF C6 H15 N O3
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

16631 REFERENCES IN FILE CA (1907 TO DATE)
1860 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
16645 REFERENCES IN FILE CAPLUS (1907 TO DATE)
39 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L6 ANSWER 13 OF 13 REGISTRY COPYRIGHT 2004 ACS on STN
RN **79-09-4** REGISTRY
CN Propanoic acid (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Propionic acid (6CI, 8CI)
OTHER NAMES:
CN Adofeed
CN Antischim B
CN Carboxyethane
CN Ethanecarboxylic acid
CN Ethylformic acid
CN Luprosil
CN Metacetonic acid
CN Methylacetic acid
CN MonoProp
CN Propcorn
CN Propkorn
CN Prozoin
CN Pseudoacetic acid
CN Toxi-Check
FS 3D CONCORD
MF C3 H6 O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

23514 REFERENCES IN FILE CA (1907 TO DATE)
1008 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
23537 REFERENCES IN FILE CAPLUS (1907 TO DATE)
7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)